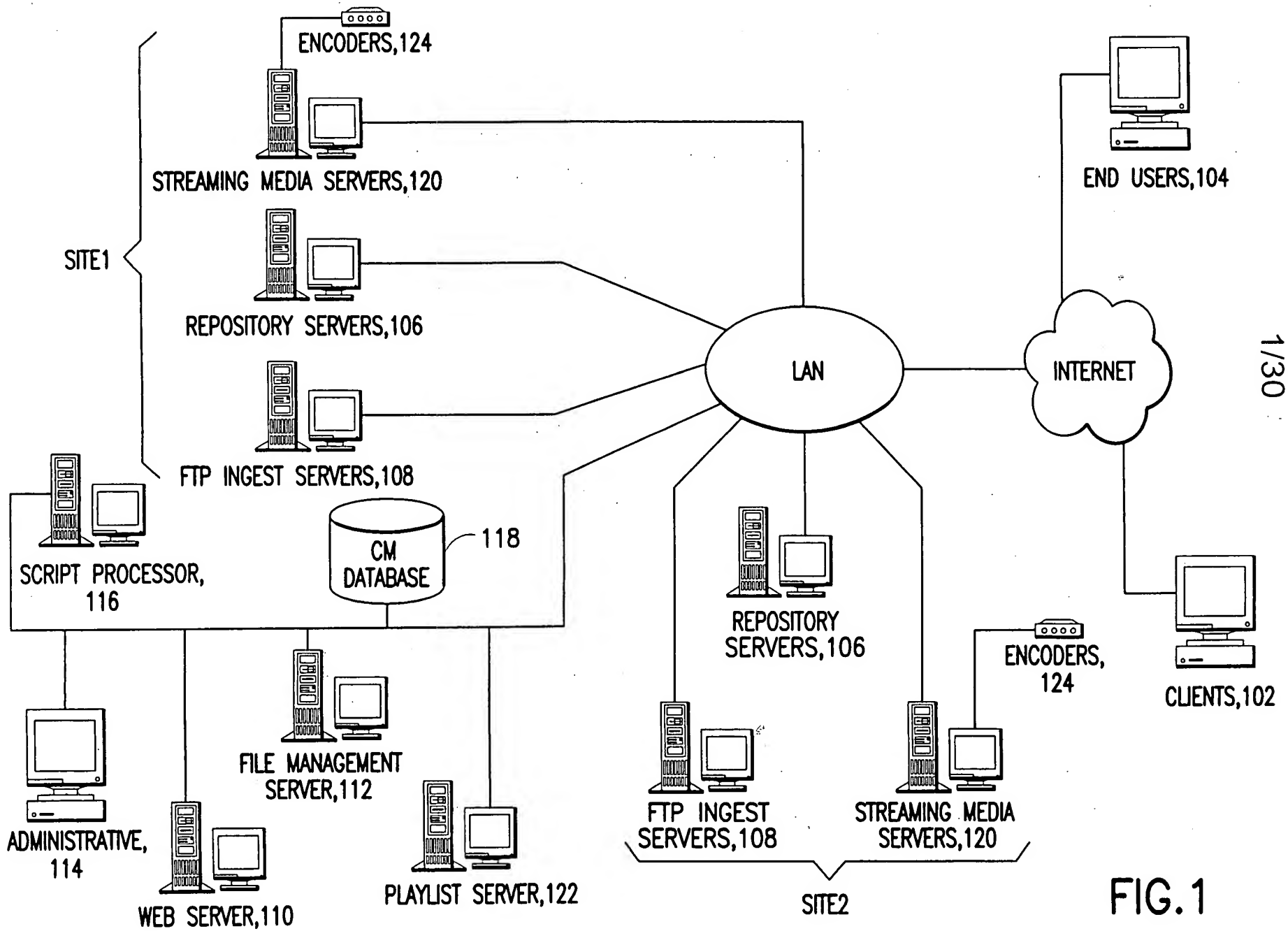
ENCODERS,124
STREAMING MEDIA SERVERS,120
SITE1
REPOSITORY SERVERS,106
FTP INGEST SERVERS,108
SCRIPT PROCESSOR, 116
CM DATABASE
118
ADMINISTRATIVE, 114
FILE MANAGEMENT SERVER,112
WEB SERVER,110
PLAYLIST SERVER,122
LAN
INTERNET
END USERS,104
REPOSITORY SERVERS,106
FTP INGEST SERVERS,108
STREAMING MEDIA SERVERS,120
ENCODERS, 124
CLIENTS,102
SITE2

FIG. 1

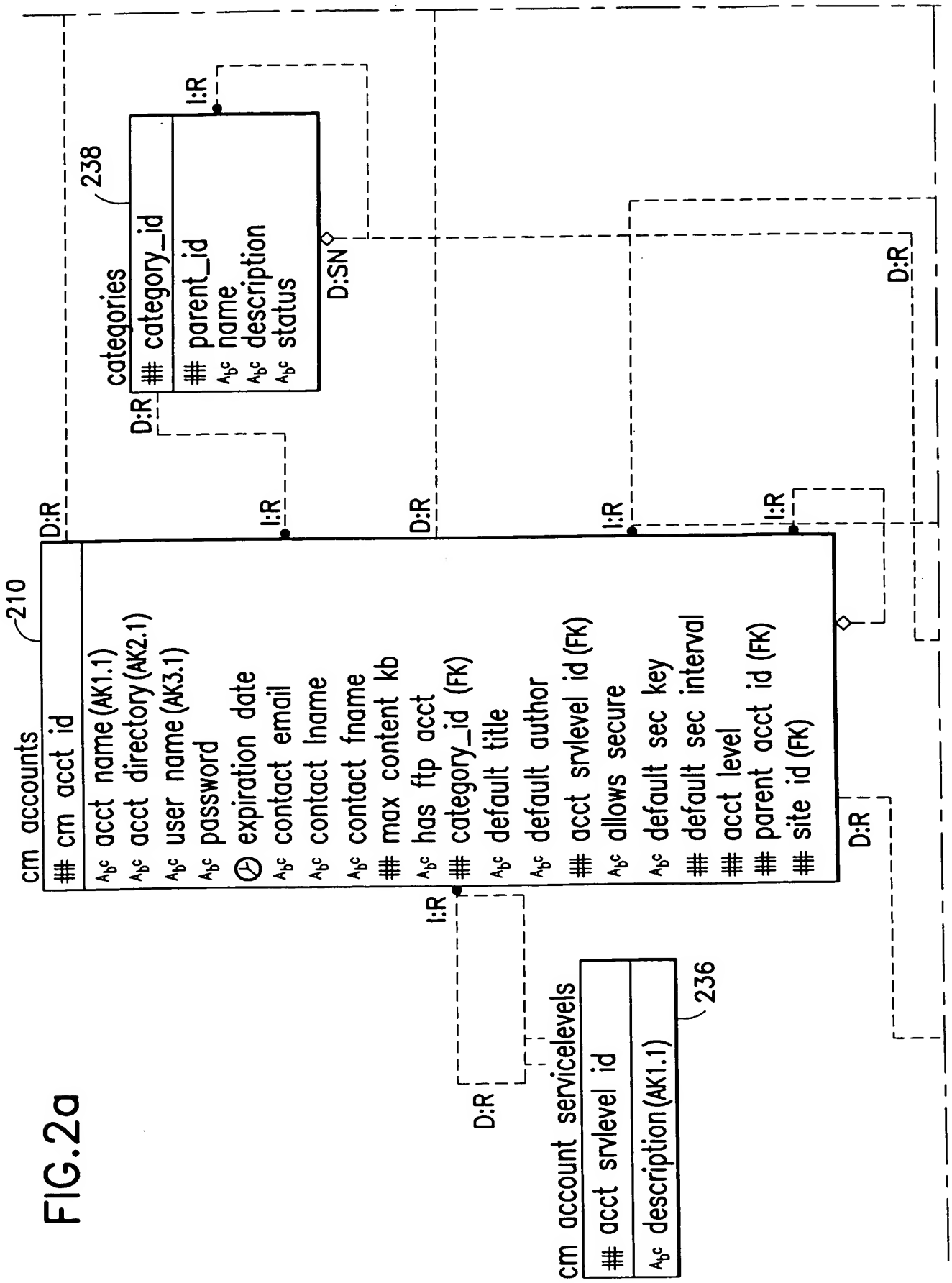
cm accounts
cm acct id
Abc acct name (AK1.1)
Abc acct directory (AK2.1)
Abc user name (AK3.1)
Abc password
expiration date
Abc contact email
Abc contact lname
Abc contact fname
max content kb
Abc has ftp acct
category_id (FK)
Abc default title
Abc default author
acct srvlevel id (FK)
Abc allows secure
Abc default sec key
default sec interval
acct level
parent acct id (FK)
site id (FK)
210
categories
category_id
parent_id
Abc name
Abc description
Abc status
238
cm account servicelevels
acct srvlevel id
Abc description (AK1.1)
236
D:R
I:R
D:SN

FIG.2a

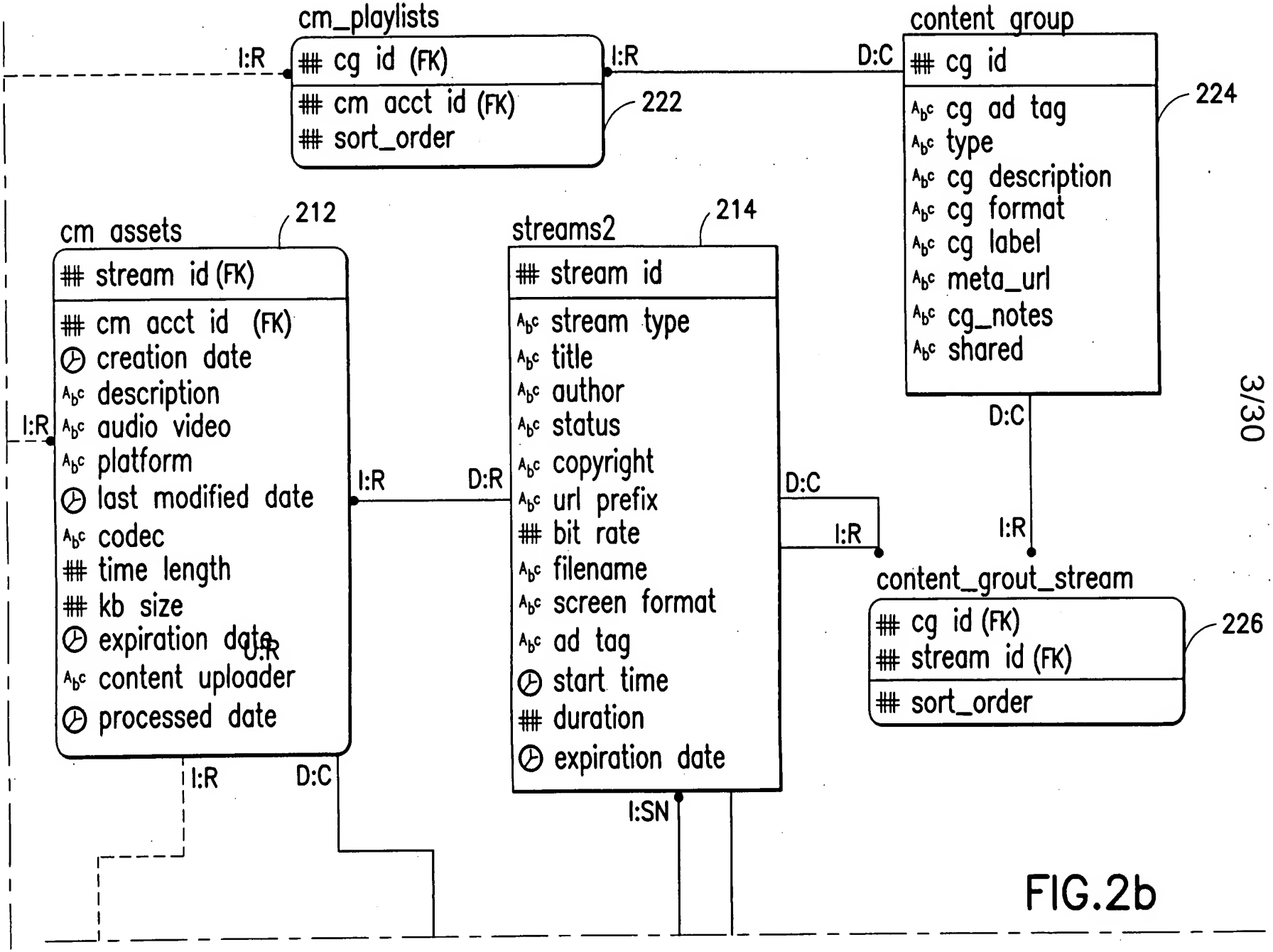
cm_playlists
I:R
cg id (FK)
cm acct id (FK)
sort_order
222
I:R
D:C
content group
cg id
Abc cg ad tag
Abc type
Abc cg description
Abc cg format
Abc cg label
Abc meta_url
Abc cg_notes
Abc shared
224
212
cm assets
stream id (FK)
cm acct id (FK)
creation date
Abc description
I:R
Abc audio video
Abc platform
last modified date
Abc codec
time length
kb size
expiration date
U:R
Abc content uploader
processed date
I:R
D:C
214
streams2
stream id
Abc stream type
Abc title
Abc author
Abc status
Abc copyright
Abc url prefix
bit rate
Abc filename
Abc screen format
Abc ad tag
start time
duration
expiration date
I:R
D:R
D:C
I:R
D:C
I:R
content_grout_stream
cg id (FK)
stream id (FK)
sort_order
226
I:SN
3/30

FIG.2b

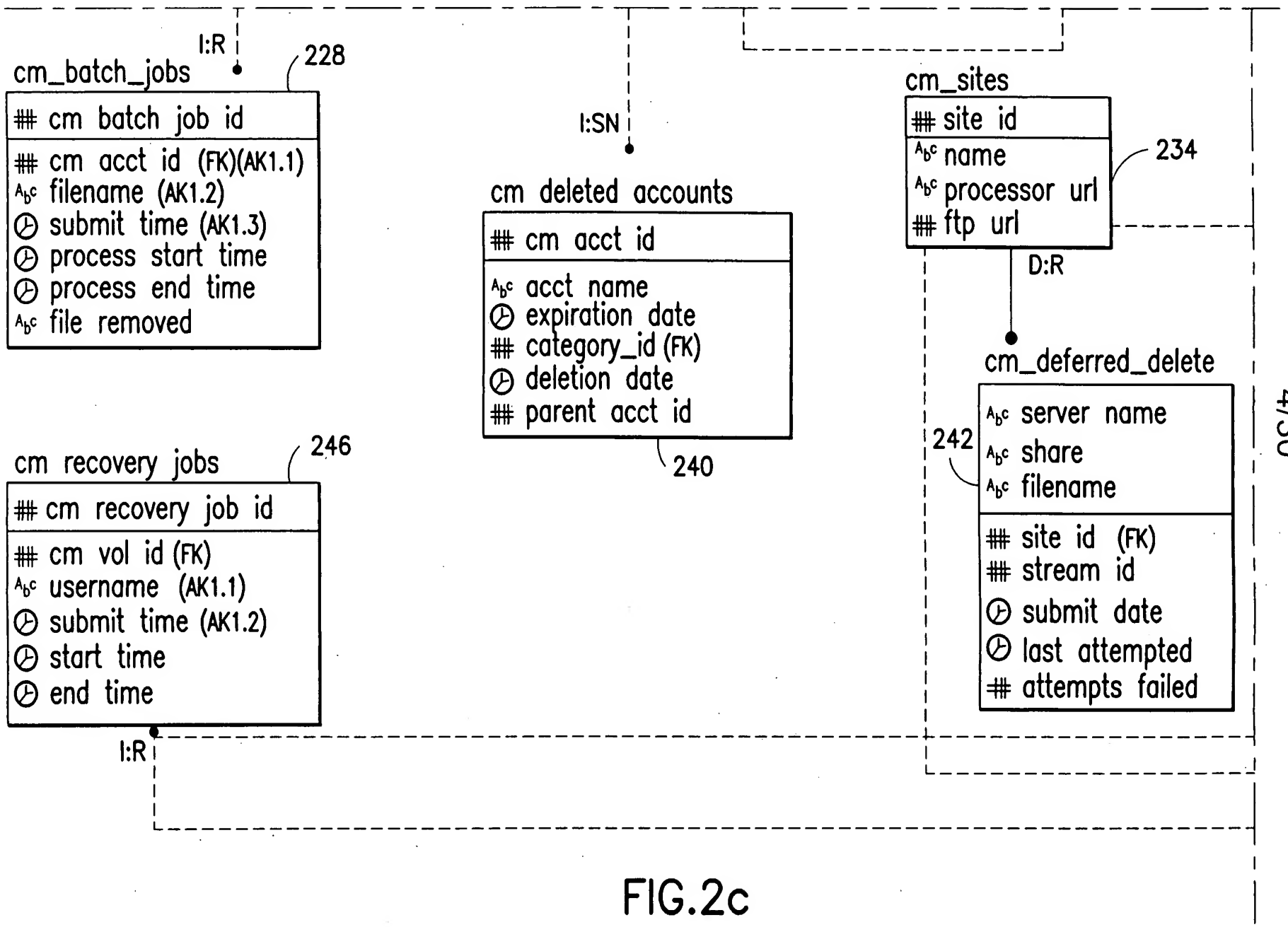
I:R
228
cm_batch_jobs
cm batch job id
cm acct id (FK)(AK1.1)
Abc filename (AK1.2)
submit time (AK1.3)
process start time
process end time
Abc file removed
I:SN
cm deleted accounts
cm acct id
Abc acct name
expiration date
category_id (FK)
deletion date
parent acct id
240
cm_sites
site id
Abc name
Abc processor url
ftp url
234
D:R
cm_deferred_delete
242
Abc server name
Abc share
Abc filename
site id (FK)
stream id
submit date
last attempted
attempts failed
246
cm recovery jobs
cm recovery job id
cm vol id (FK)
Abc username (AK1.1)
submit time (AK1.2)
start time
end time
I:R
4/30

FIG.2c

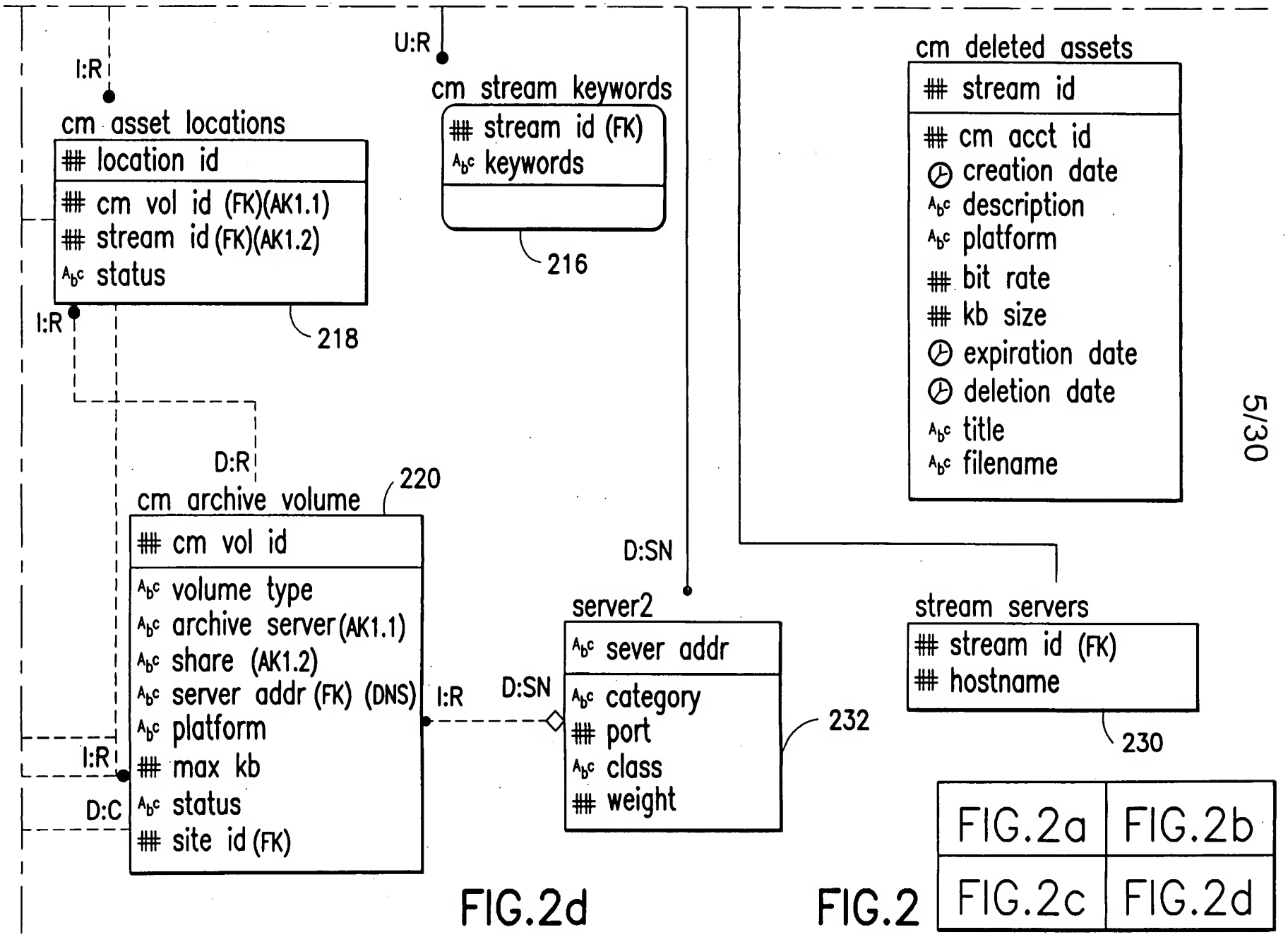

FIG.2d

FIG.2

FIG.2a	FIG.2b
FIG.2c	FIG.2d

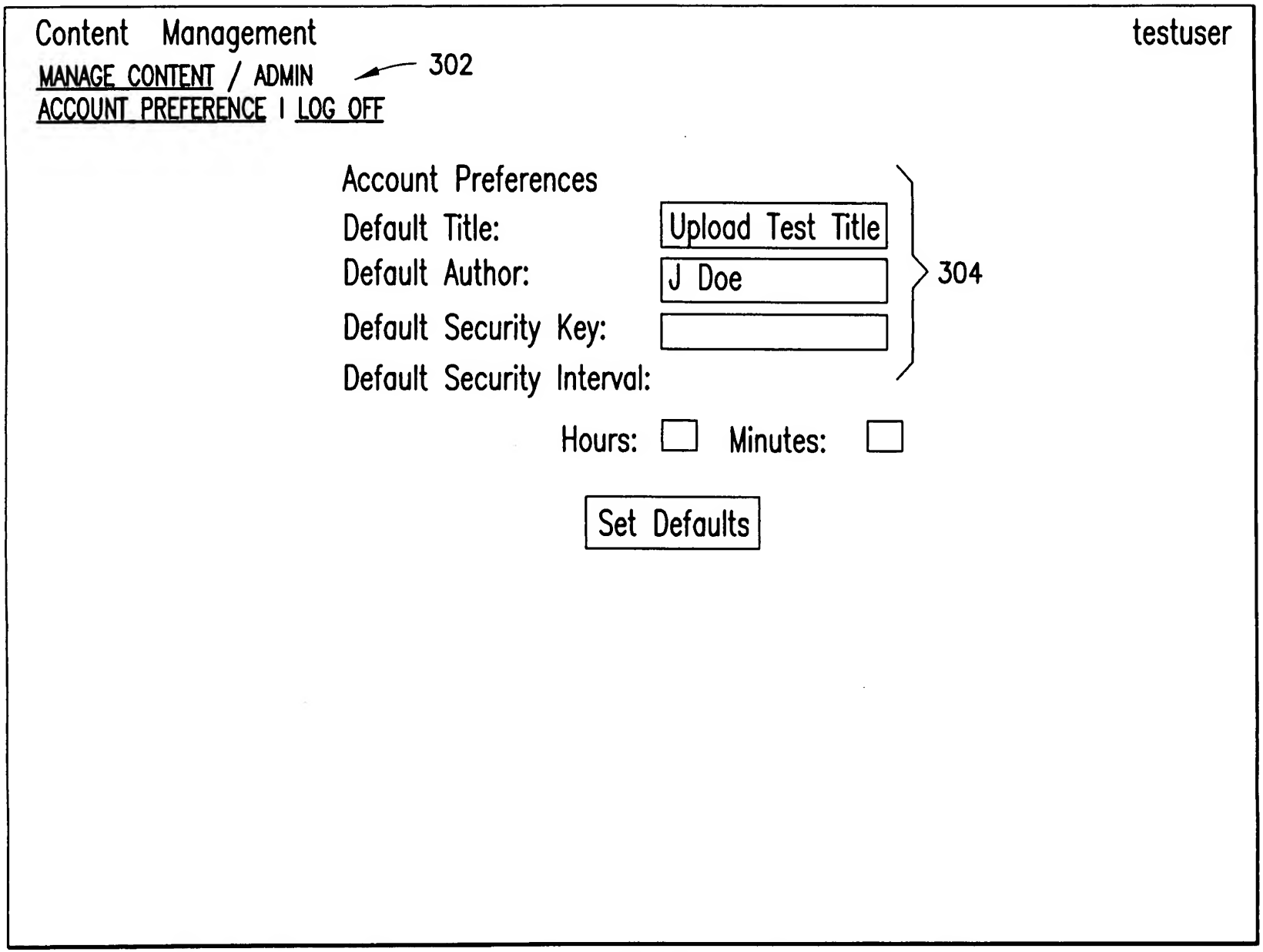
Content Management
testuser
MANAGE CONTENT / ADMIN
ACCOUNT PREFERENCE | LOG OFF
302
Account Preferences
Default Title:
Upload Test Title
Default Author:
J Doe
Default Security Key:
Default Security Interval:
304
Hours:
Minutes:
Set Defaults

FIG.3a

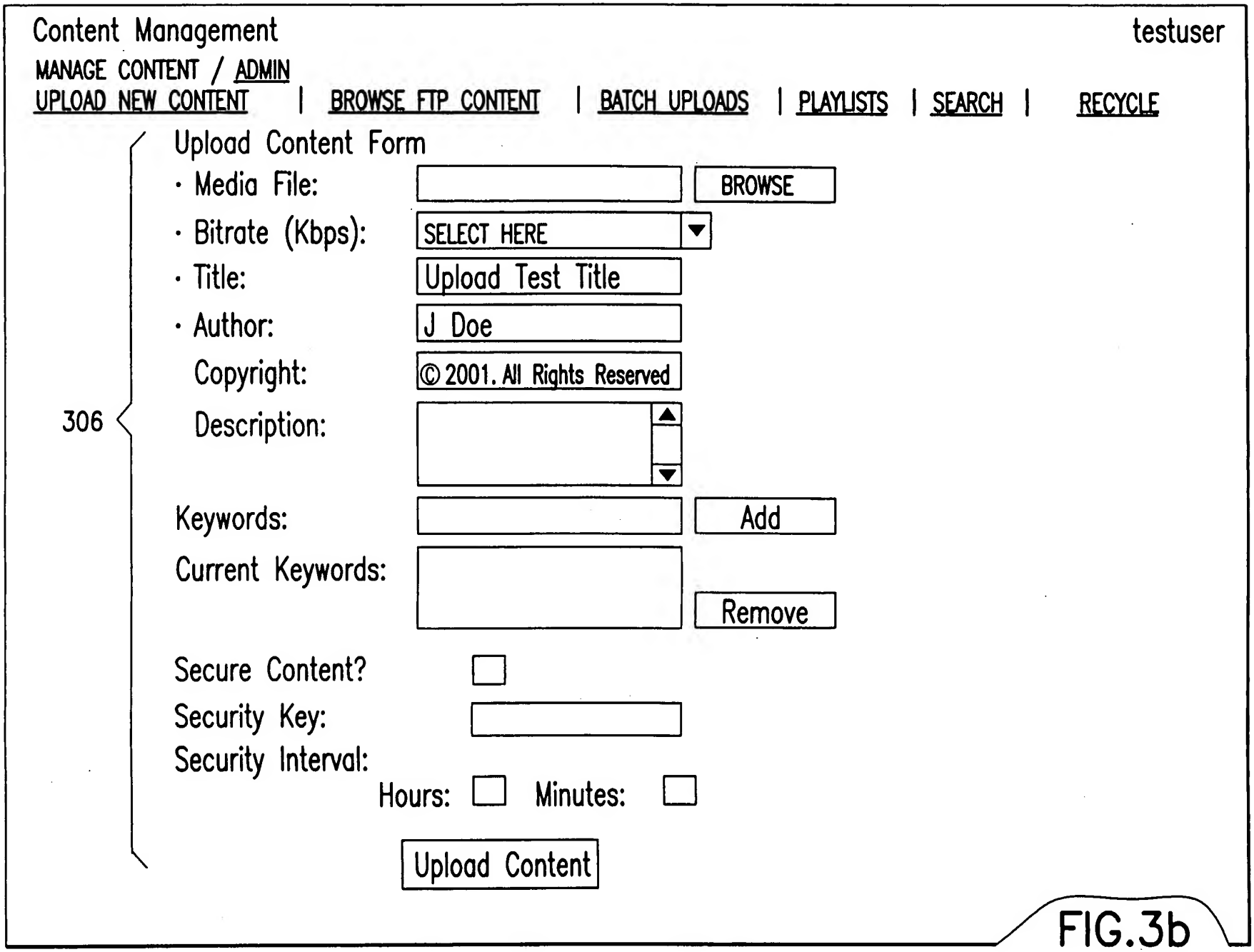
Content Management
testuser
MANAGE CONTENT / ADMIN
UPLOAD NEW CONTENT | BROWSE FTP CONTENT | BATCH UPLOADS | PLAYLISTS | SEARCH | RECYCLE
Upload Content Form
· Media File:
BROWSE
· Bitrate (Kbps):
SELECT HERE
· Title:
Upload Test Title
· Author:
J Doe
Copyright:
© 2001. All Rights Reserved
306
Description:
Keywords:
Add
Current Keywords:
Remove
Secure Content?
Security Key:
Security Interval:
Hours:
Minutes:
Upload Content

FIG.3b

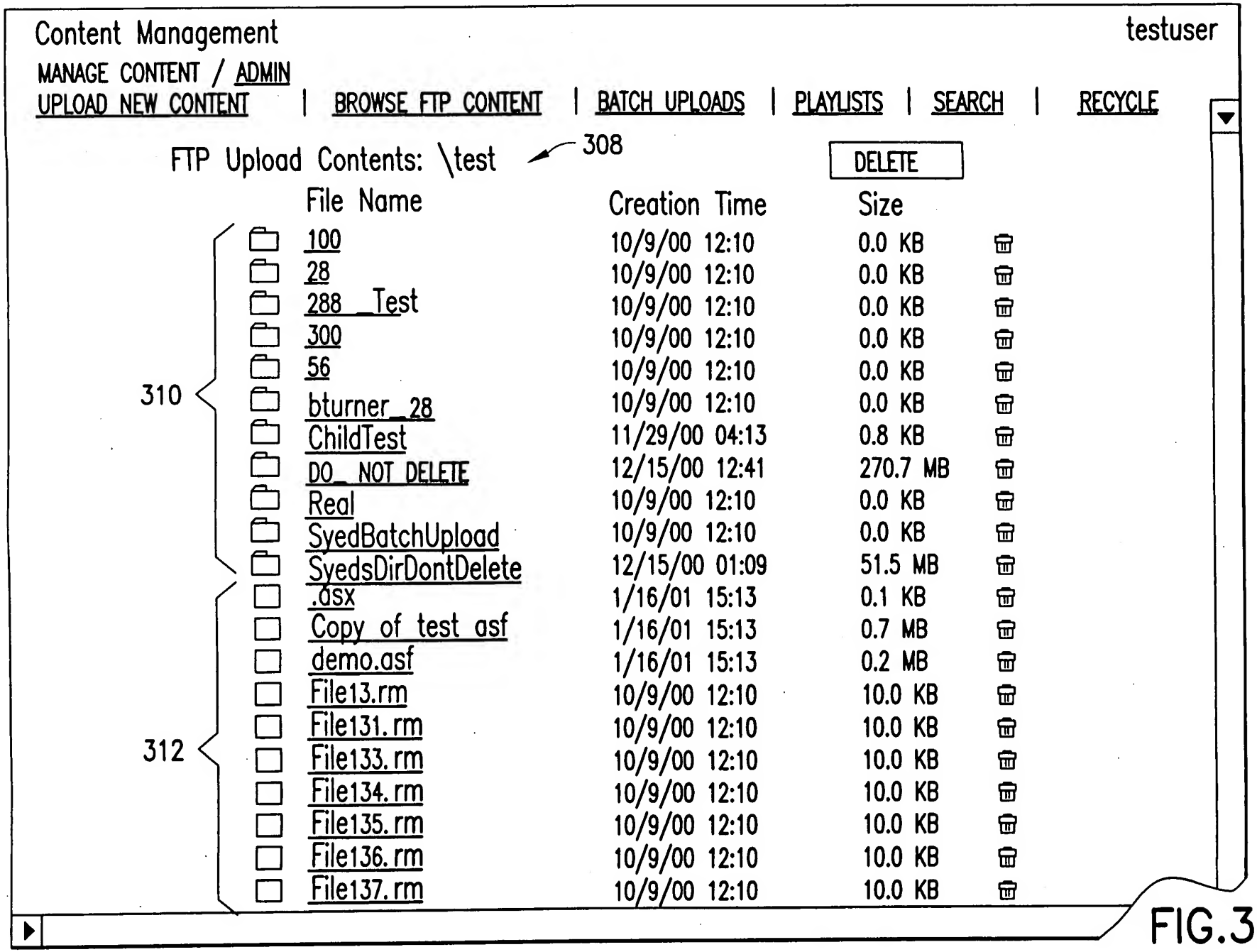
Content Management
testuser
MANAGE CONTENT / ADMIN
UPLOAD NEW CONTENT | BROWSE FTP CONTENT | BATCH UPLOADS | PLAYLISTS | SEARCH | RECYCLE
FTP Upload Contents: \test
308
DELETE
File Name
Creation Time
Size
100 10/9/00 12:10 0.0 KB
28 10/9/00 12:10 0.0 KB
288 _Test 10/9/00 12:10 0.0 KB
300 10/9/00 12:10 0.0 KB
56 10/9/00 12:10 0.0 KB
bturner_28 10/9/00 12:10 0.0 KB
ChildTest 11/29/00 04:13 0.8 KB
DO_ NOT DELETE 12/15/00 12:41 270.7 MB
Real 10/9/00 12:10 0.0 KB
SyedBatchUpload 10/9/00 12:10 0.0 KB
SyedsDirDontDelete 12/15/00 01:09 51.5 MB
.asx 1/16/01 15:13 0.1 KB
Copy of test asf 1/16/01 15:13 0.7 MB
demo.asf 1/16/01 15:13 0.2 MB
File13.rm 10/9/00 12:10 10.0 KB
File131.rm 10/9/00 12:10 10.0 KB
File133.rm 10/9/00 12:10 10.0 KB
File134.rm 10/9/00 12:10 10.0 KB
File135.rm 10/9/00 12:10 10.0 KB
File136.rm 10/9/00 12:10 10.0 KB
File137.rm 10/9/00 12:10 10.0 KB
310
312

FIG.3c

Content Management testuser

MANAGE CONTENT / ADMIN

UPLOAD NEW CONTENT | BROWSE FTP CONTENT | BATCH UPLOADS | PLAYLISTS | SEARCH | RECYCLE

Batch Uploads

Available Batch Files

PROCESS DELETE

	File Name	Creation Time	Size	
314	☐ 1-100. bul	10/9/00 12:10	7.9 KB	🗑
	☐ 101-200. bul	10/9/00 12:10	8.1 KB	🗑
	☐ 26- anthony.bul	10/9/00 12:10	0.1 KB	🗑
	☐ BillDefault.txt	10/6/00 10:38	0.1 KB	🗑
	☐ BillsSmBatch.txt	1/18/01 12:28	0.3 KB	🗑

Batch Process Summary

316

Batch File	Submit Time	Process Start Time	Process End Time
BillDefault.txt	11/15/00 10:26:51 AM	11/16/00 4:13:02 AM	11/16/00 4:13:07 AM
SyedTest 20001116.bul	11/16/00 4:44:11 AM	11/16/00 4:53:00 AM	
100 RM Files.bul	1/18/01 5:27:50 AM	1/18/01 5:39:22 AM	1/18/01 5:46:45 AM
100 WM Files.bul	1/18/01 5:27:50 AM	1/18/01 5:46:45 AM	1/18/01 5:53:59 AM
10RMFiles.bul	1/18/01 8:16:06 AM	1/18/01 8:20:01 AM	1/18/01 8:21:19 AM
10WMFiles.bul	1/18/01 8:16:08 AM	1/18/01 8:21:19 AM	1/18/01 8:22:22 AM

FIG.3d

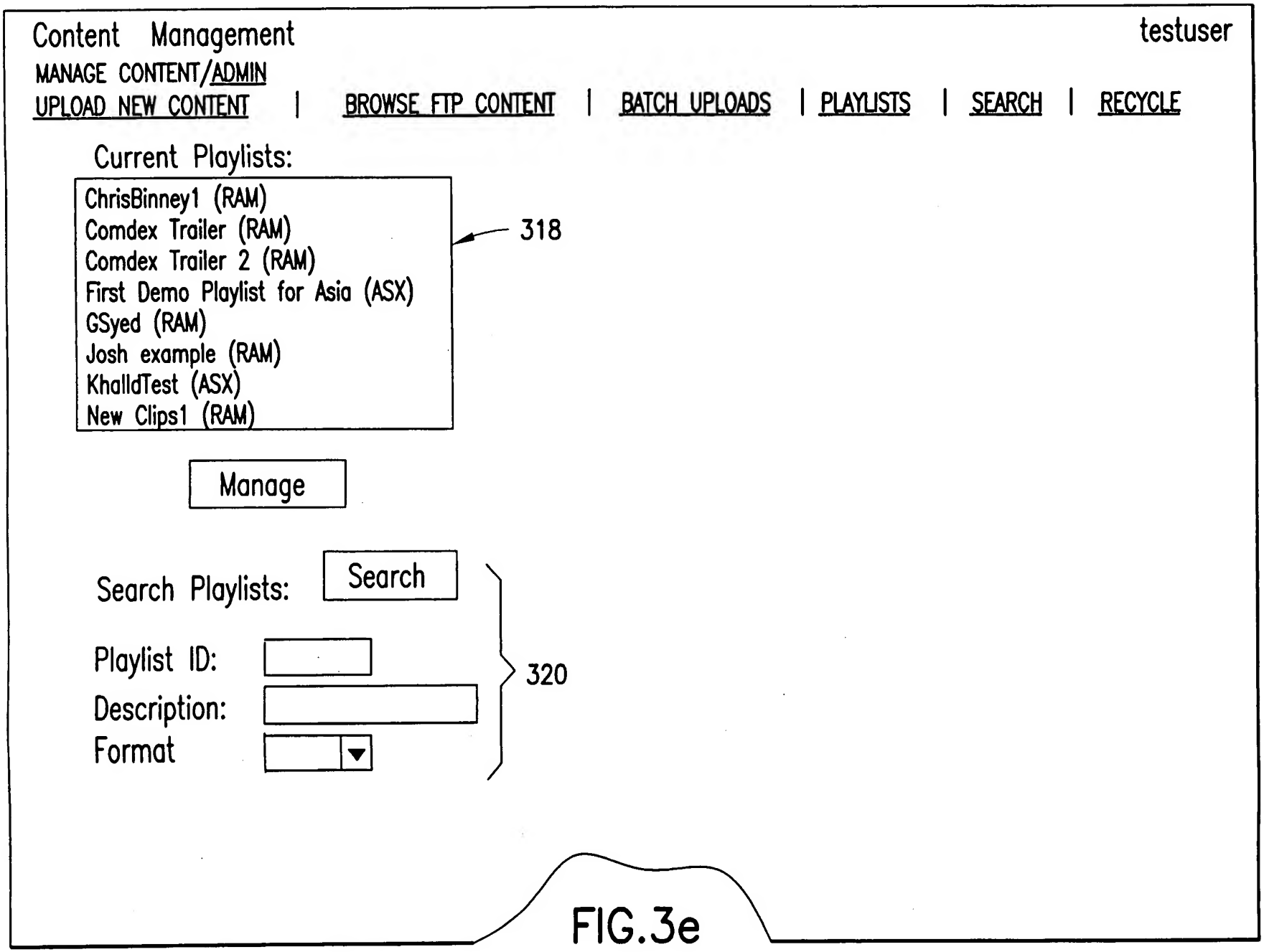
Content Management
testuser
MANAGE CONTENT/ADMIN
UPLOAD NEW CONTENT | BROWSE FTP CONTENT | BATCH UPLOADS | PLAYLISTS | SEARCH | RECYCLE
Current Playlists:
ChrisBinney1 (RAM)
Comdex Trailer (RAM)
Comdex Trailer 2 (RAM)
First Demo Playlist for Asia (ASX)
GSyed (RAM)
Josh example (RAM)
KhalldTest (ASX)
New Clips1 (RAM)
318
Manage
Search Playlists:
Search
Playlist ID:
Description:
Format
320

FIG.3e

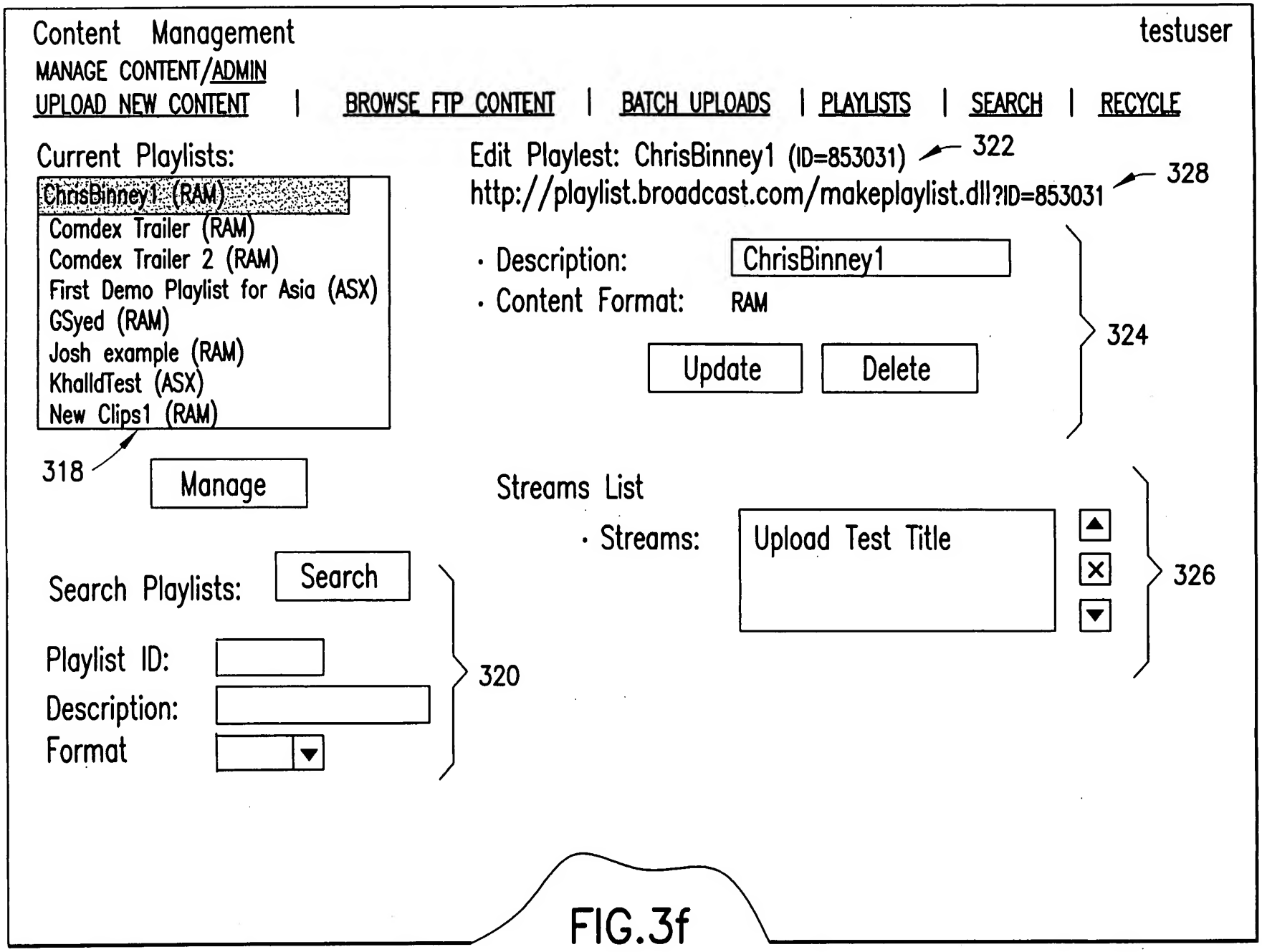
Content Management
testuser
MANAGE CONTENT/ADMIN
UPLOAD NEW CONTENT | BROWSE FTP CONTENT | BATCH UPLOADS | PLAYLISTS | SEARCH | RECYCLE
Current Playlists:
ChrisBinney1 (RAM)
Comdex Trailer (RAM)
Comdex Trailer 2 (RAM)
First Demo Playlist for Asia (ASX)
GSyed (RAM)
Josh example (RAM)
KhalidTest (ASX)
New Clips1 (RAM)
318
Manage
Edit Playlest: ChrisBinney1 (ID=853031)
322
http://playlist.broadcast.com/makeplaylist.dll?ID=853031
328
· Description: ChrisBinney1
· Content Format: RAM
Update
Delete
324
Streams List
· Streams: Upload Test Title
326
Search Playlists:
Search
Playlist ID:
Description:
Format
320

FIG.3f

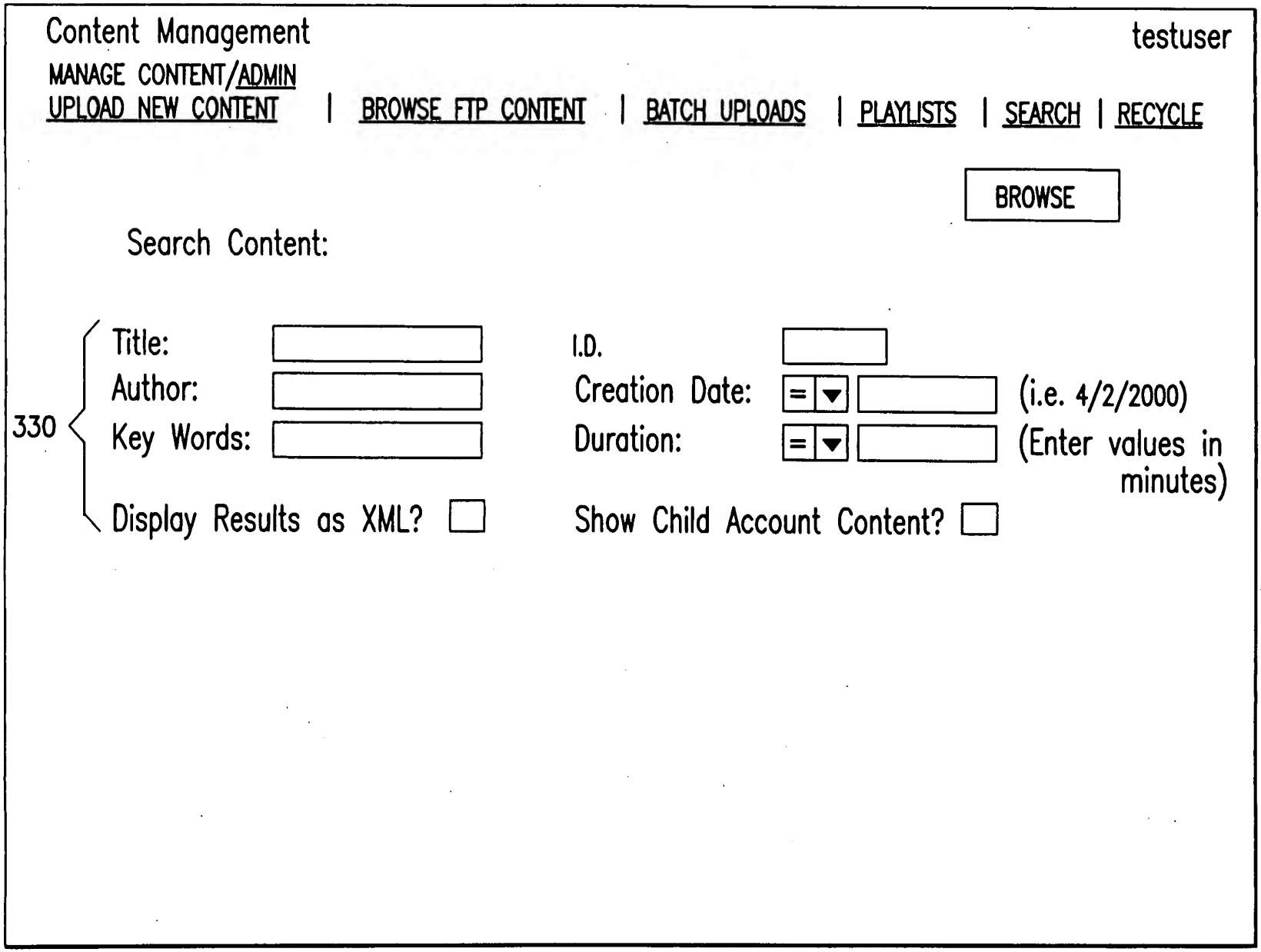
Content Management
testuser
MANAGE CONTENT/ADMIN
UPLOAD NEW CONTENT | BROWSE FTP CONTENT | BATCH UPLOADS | PLAYLISTS | SEARCH | RECYCLE
BROWSE
Search Content:
330
Title:
Author:
Key Words:
Display Results as XML?
I.D.
Creation Date:
Duration:
(i.e. 4/2/2000)
(Enter values in minutes)
Show Child Account Content?

FIG.3g

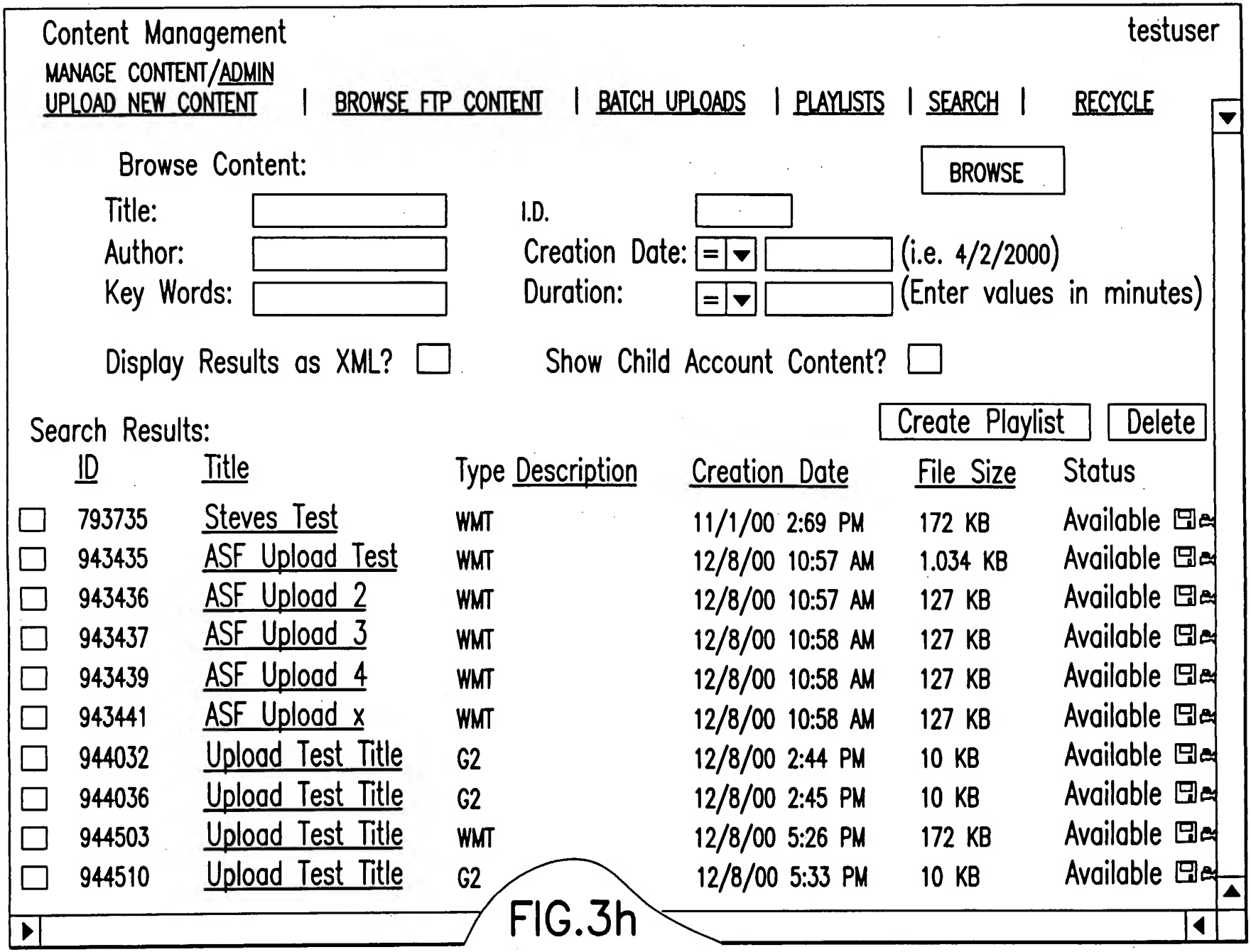
Content Management
testuser
MANAGE CONTENT/ADMIN
UPLOAD NEW CONTENT | BROWSE FTP CONTENT | BATCH UPLOADS | PLAYLISTS | SEARCH | RECYCLE
Browse Content:
BROWSE
Title:
I.D.
Author:
Creation Date: = (i.e. 4/2/2000)
Key Words:
Duration: = (Enter values in minutes)
Display Results as XML?
Show Child Account Content?
Search Results:
Create Playlist
Delete
ID Title Type Description Creation Date File Size Status
793735 Steves Test WMT 11/1/00 2:69 PM 172 KB Available
943435 ASF Upload Test WMT 12/8/00 10:57 AM 1.034 KB Available
943436 ASF Upload 2 WMT 12/8/00 10:57 AM 127 KB Available
943437 ASF Upload 3 WMT 12/8/00 10:58 AM 127 KB Available
943439 ASF Upload 4 WMT 12/8/00 10:58 AM 127 KB Available
943441 ASF Upload x WMT 12/8/00 10:58 AM 127 KB Available
944032 Upload Test Title G2 12/8/00 2:44 PM 10 KB Available
944036 Upload Test Title G2 12/8/00 2:45 PM 10 KB Available
944503 Upload Test Title WMT 12/8/00 5:26 PM 172 KB Available
944510 Upload Test Title G2 12/8/00 5:33 PM 10 KB Available

FIG.3h

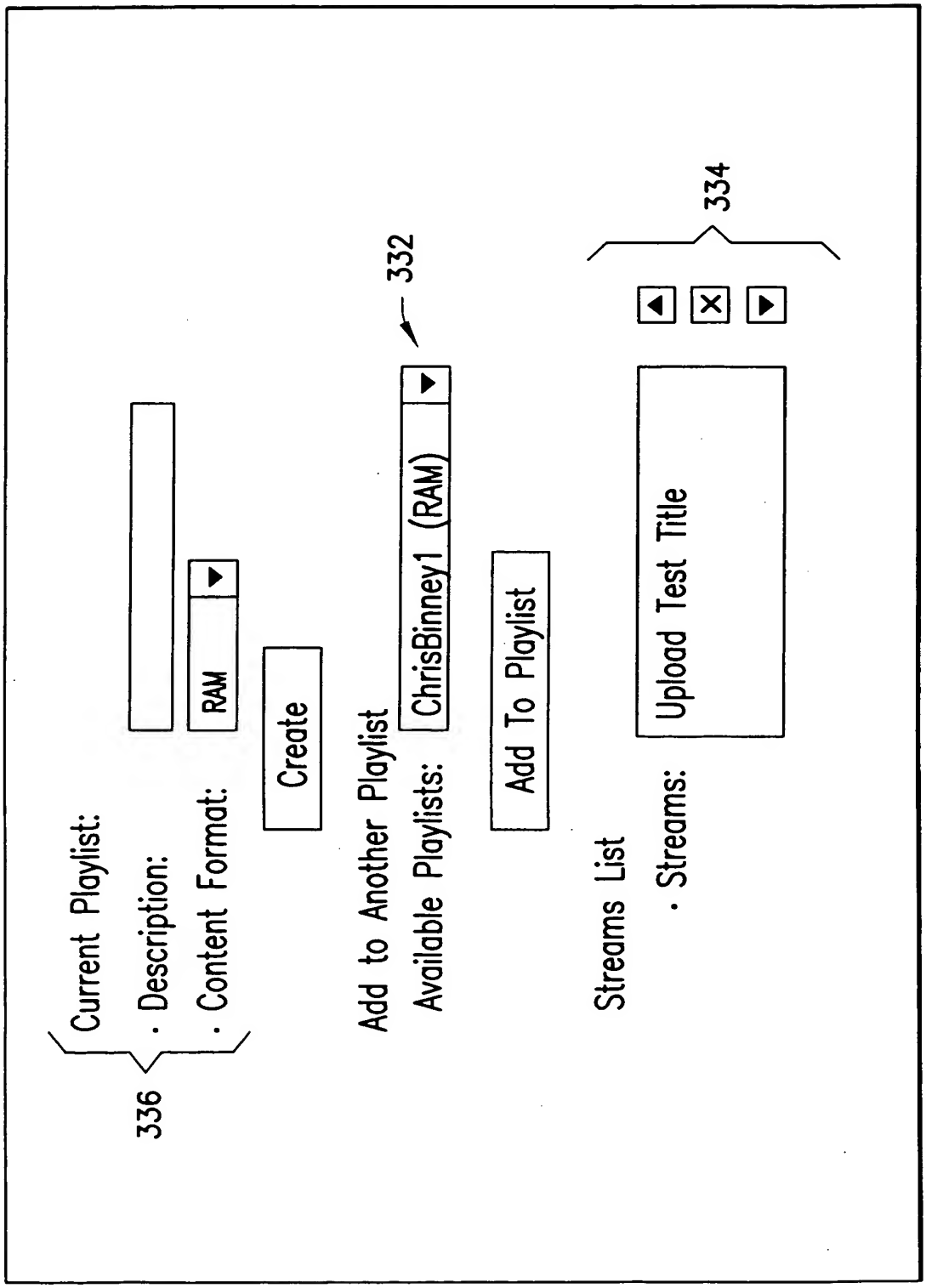
Current Playlist:
· Description:
· Content Format:
RAM
Create
336
Add to Another Playlist
Available Playlists:
ChrisBinney1 (RAM)
332
Add To Playlist
Streams List
· Streams:
Upload Test Title
334

FIG.3i

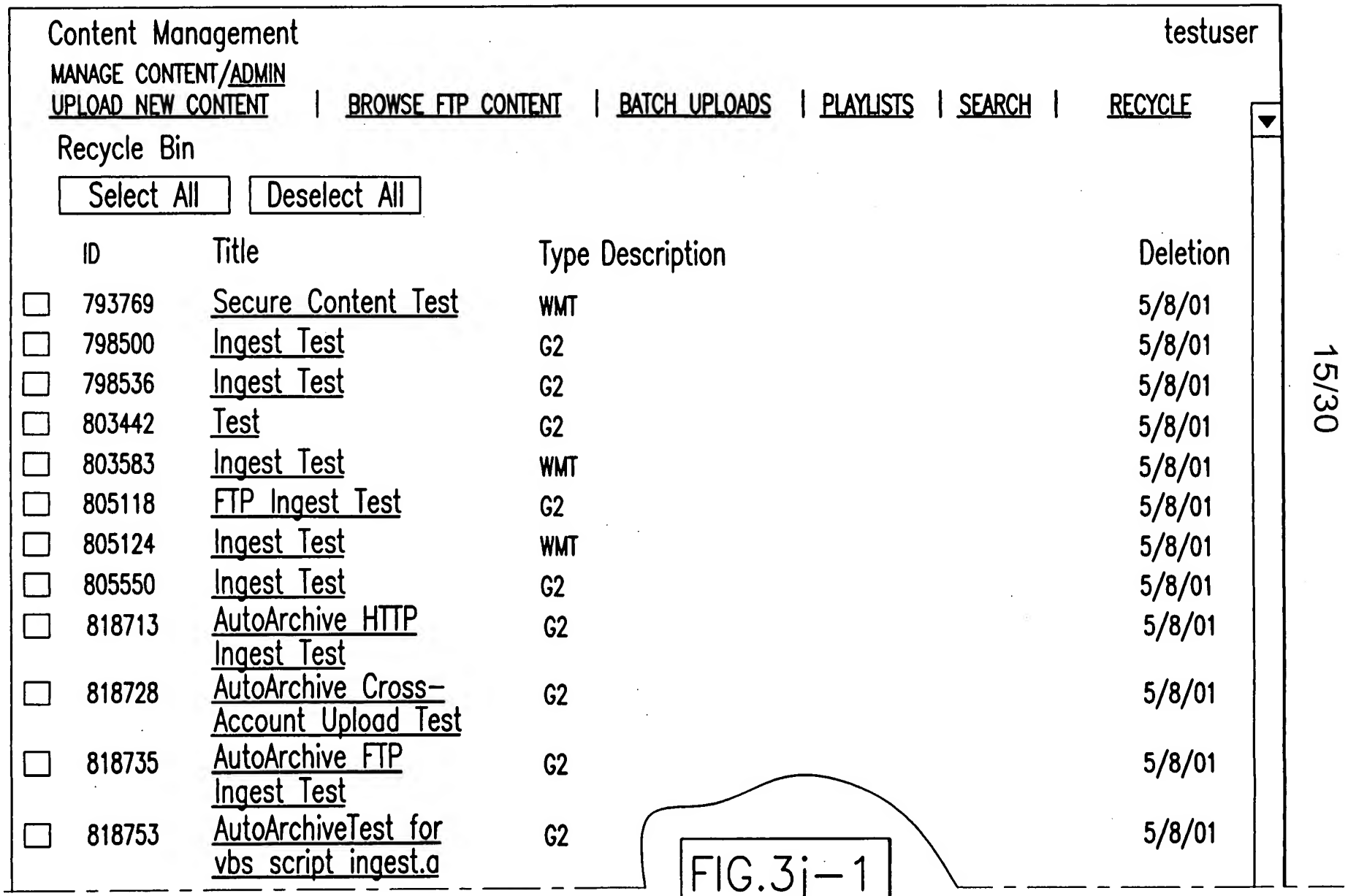

FIG.3j

FIG.3j-1
FIG.3j-2

FIG.3j-1

☐	818806	AutoArchive HTTP Ingest Test	G2		5/8/01
☐	818809	AutoArchive FTP Ingest Test	G2		5/8/01
☐	818815	AutoArchiveTest for vbs script ingest.a	G2		5/8/01
☐	818819	AutoArchive Cross-Account Upload Test	G2		5/8/01
☐	818856	Ingest Test (BTumer)	WMT		5/8/01
☐	818858	Another Upload Test (BT)	G2		5/8/01
☐	818861	BT Test Again	WMT		5/8/01
☐	867345	Ingest Test GSyed	G2		5/8/01
☐	867346	Ingest Test GSyed	G2		5/8/01
☐	870081	This is a test title	G2		5/8/01
☐	870173	Bill T TitleTest	G2		5/8/01
☐	872066	Ingest Test from FTP (injust004)	G2		5/8/01
☐	872096	Ingest Test (direct on (injust004)	G2		5/8/01
☐	874436	Scott Susen's Test	WMT	Some Descreption	5/8/01
☐	874472	Ingest Test	G2		5/8/01
☐	874730	Ingest Test	WMT		5/8/01
☐	875368	Ingest Test	WMT		5/8/01

FIG.3j-2

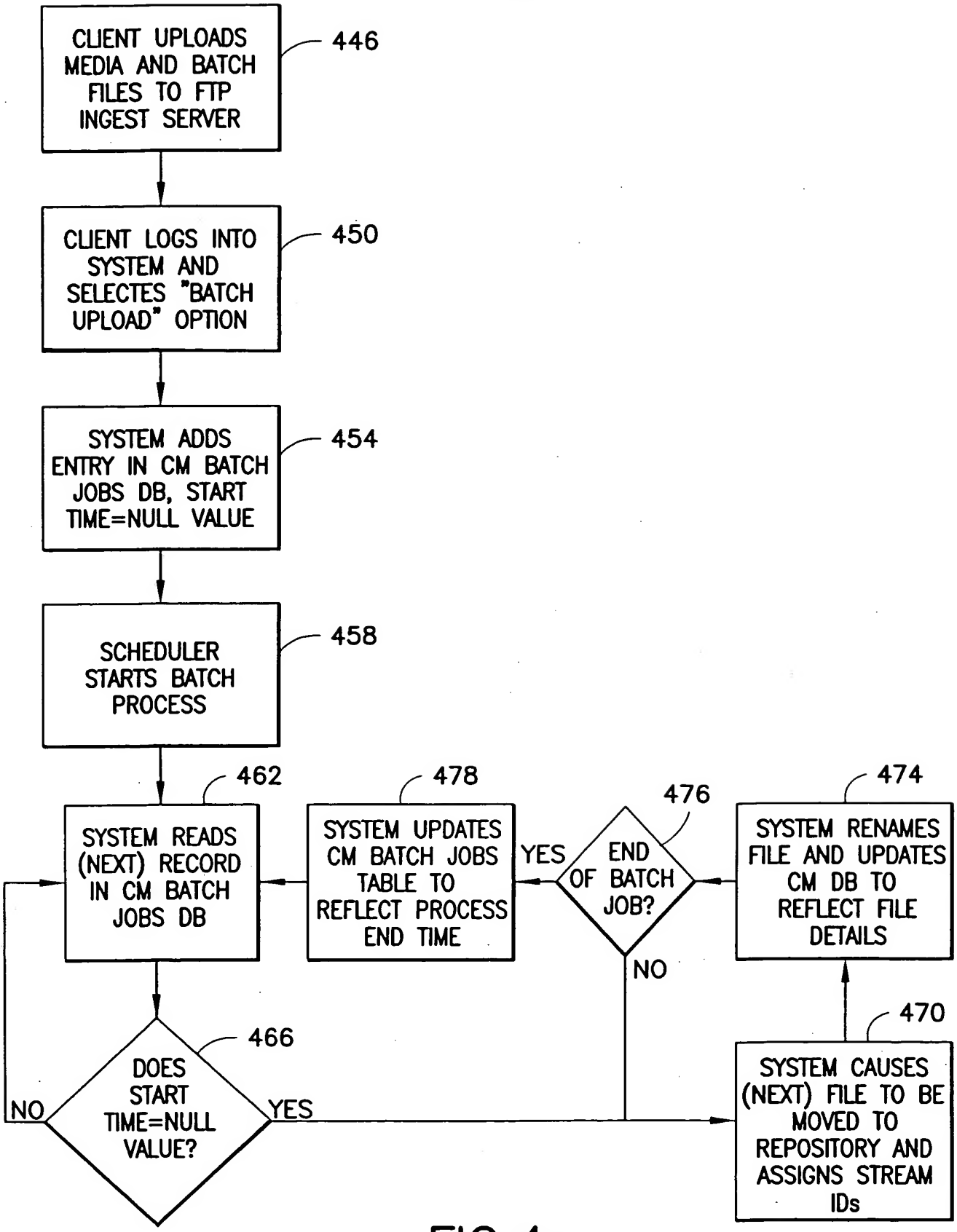
CLIENT UPLOADS MEDIA AND BATCH FILES TO FTP INGEST SERVER
446
CLIENT LOGS INTO SYSTEM AND SELECTES "BATCH UPLOAD" OPTION
450
SYSTEM ADDS ENTRY IN CM BATCH JOBS DB, START TIME=NULL VALUE
454
SCHEDULER STARTS BATCH PROCESS
458
462
SYSTEM READS (NEXT) RECORD IN CM BATCH JOBS DB
478
SYSTEM UPDATES CM BATCH JOBS TABLE TO REFLECT PROCESS END TIME
476
END OF BATCH JOB?
YES
NO
474
SYSTEM RENAMES FILE AND UPDATES CM DB TO REFLECT FILE DETAILS
466
DOES START TIME=NULL VALUE?
NO
YES
470
SYSTEM CAUSES (NEXT) FILE TO BE MOVED TO REPOSITORY AND ASSIGNS STREAM IDs

FIG.4a

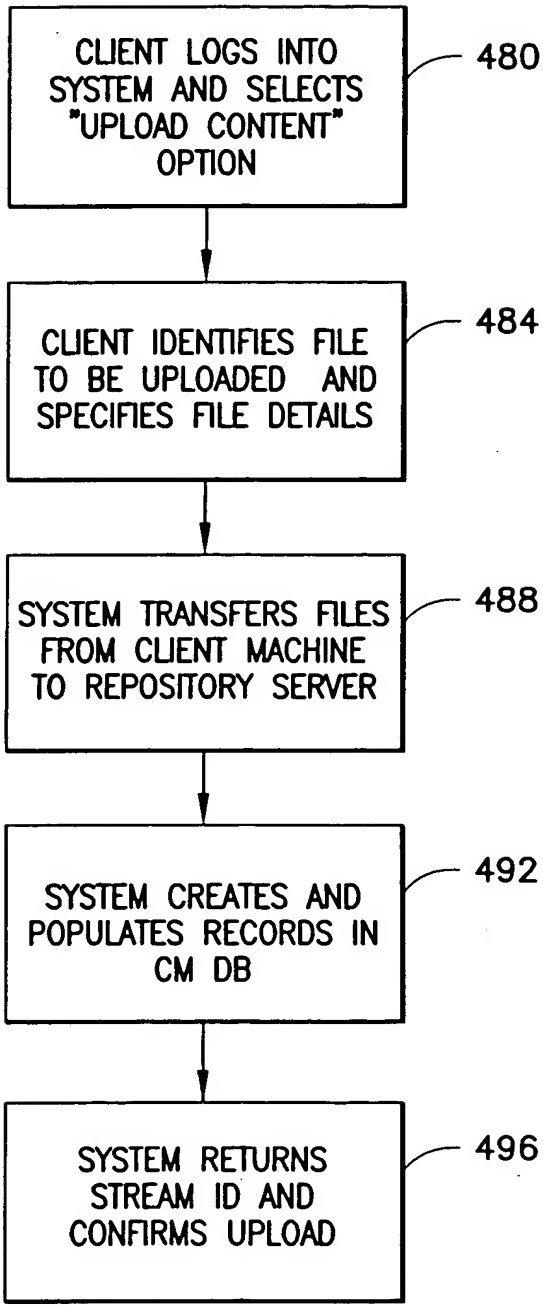
CLIENT LOGS INTO SYSTEM AND SELECTS "UPLOAD CONTENT" OPTION
480
CLIENT IDENTIFIES FILE TO BE UPLOADED AND SPECIFIES FILE DETAILS
484
SYSTEM TRANSFERS FILES FROM CLIENT MACHINE TO REPOSITORY SERVER
488
SYSTEM CREATES AND POPULATES RECORDS IN CM DB
492
SYSTEM RETURNS STREAM ID AND CONFIRMS UPLOAD
496

FIG.4b

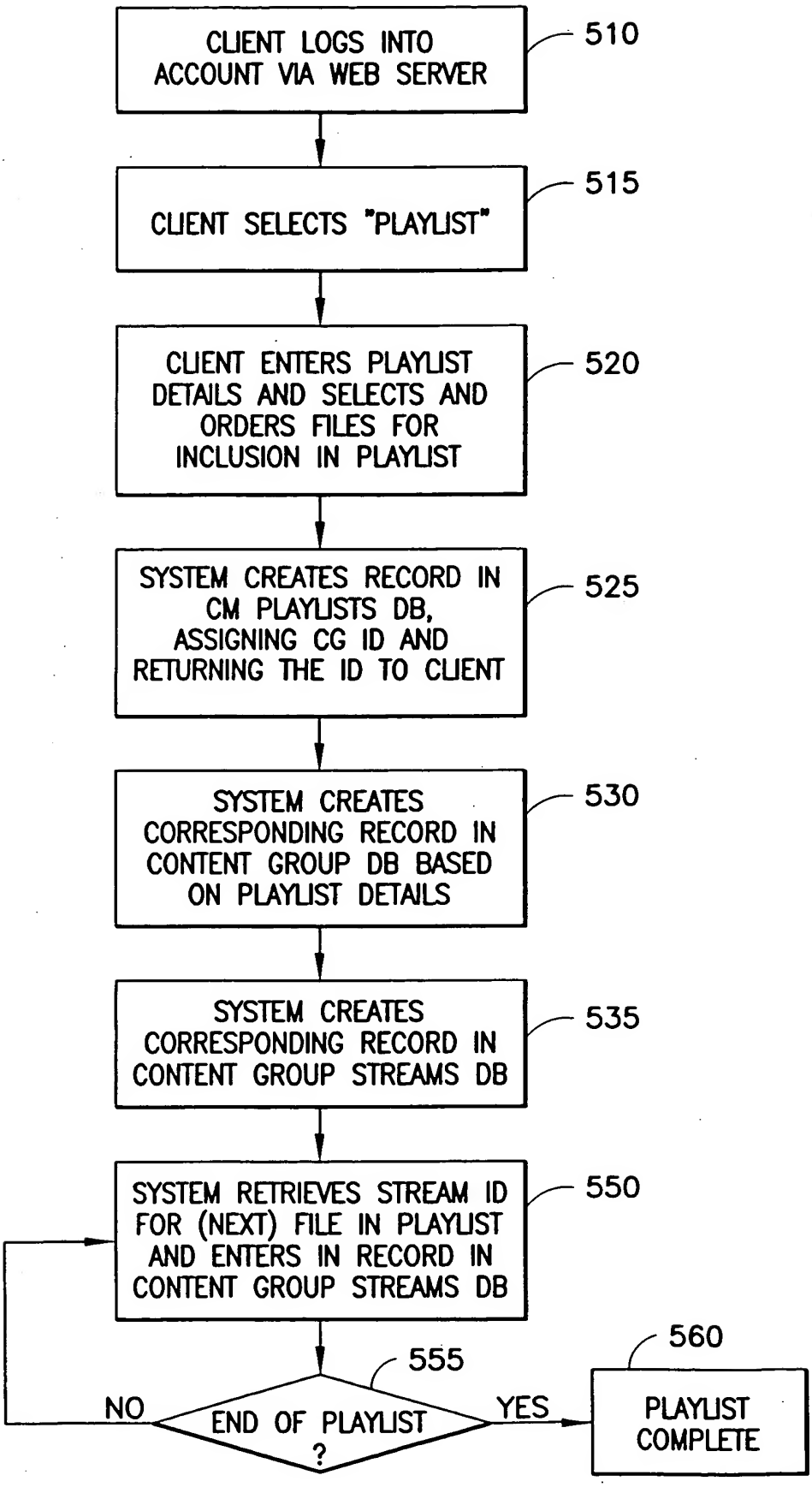
CLIENT LOGS INTO ACCOUNT VIA WEB SERVER
510
CLIENT SELECTS "PLAYLIST"
515
CLIENT ENTERS PLAYLIST DETAILS AND SELECTS AND ORDERS FILES FOR INCLUSION IN PLAYLIST
520
SYSTEM CREATES RECORD IN CM PLAYLISTS DB, ASSIGNING CG ID AND RETURNING THE ID TO CLIENT
525
SYSTEM CREATES CORRESPONDING RECORD IN CONTENT GROUP DB BASED ON PLAYLIST DETAILS
530
SYSTEM CREATES CORRESPONDING RECORD IN CONTENT GROUP STREAMS DB
535
SYSTEM RETRIEVES STREAM ID FOR (NEXT) FILE IN PLAYLIST AND ENTERS IN RECORD IN CONTENT GROUP STREAMS DB
550
555
END OF PLAYLIST ?
NO
YES
560
PLAYLIST COMPLETE

FIG.5

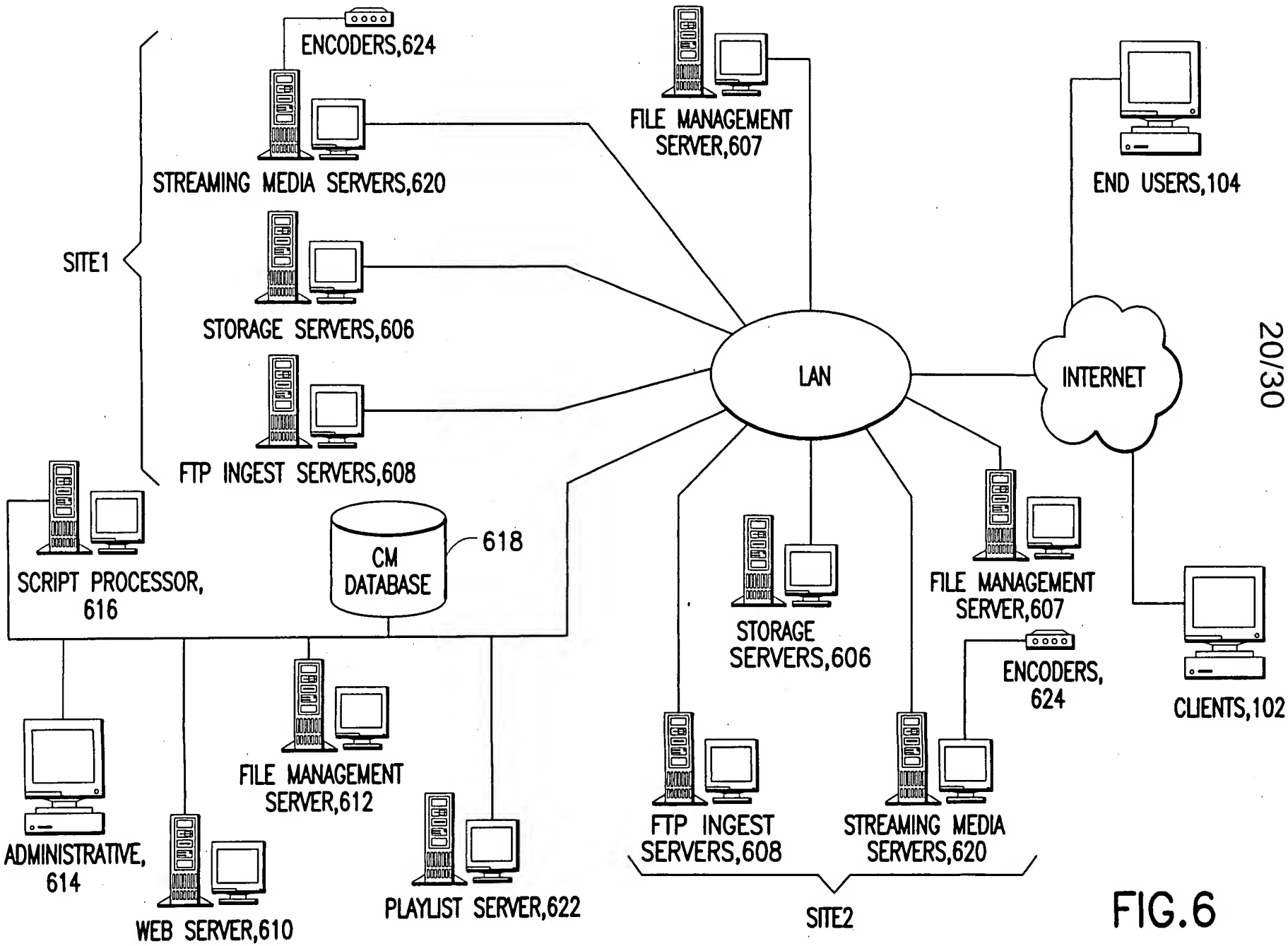
ENCODERS,624
STREAMING MEDIA SERVERS,620
STORAGE SERVERS,606
FTP INGEST SERVERS,608
SITE1
FILE MANAGEMENT SERVER,607
END USERS,104
LAN
INTERNET
SCRIPT PROCESSOR, 616
CM DATABASE
618
FILE MANAGEMENT SERVER,612
ADMINISTRATIVE, 614
WEB SERVER,610
PLAYLIST SERVER,622
STORAGE SERVERS,606
FILE MANAGEMENT SERVER,607
ENCODERS, 624
CLIENTS,102
FTP INGEST SERVERS,608
STREAMING MEDIA SERVERS,620
SITE2

FIG.6

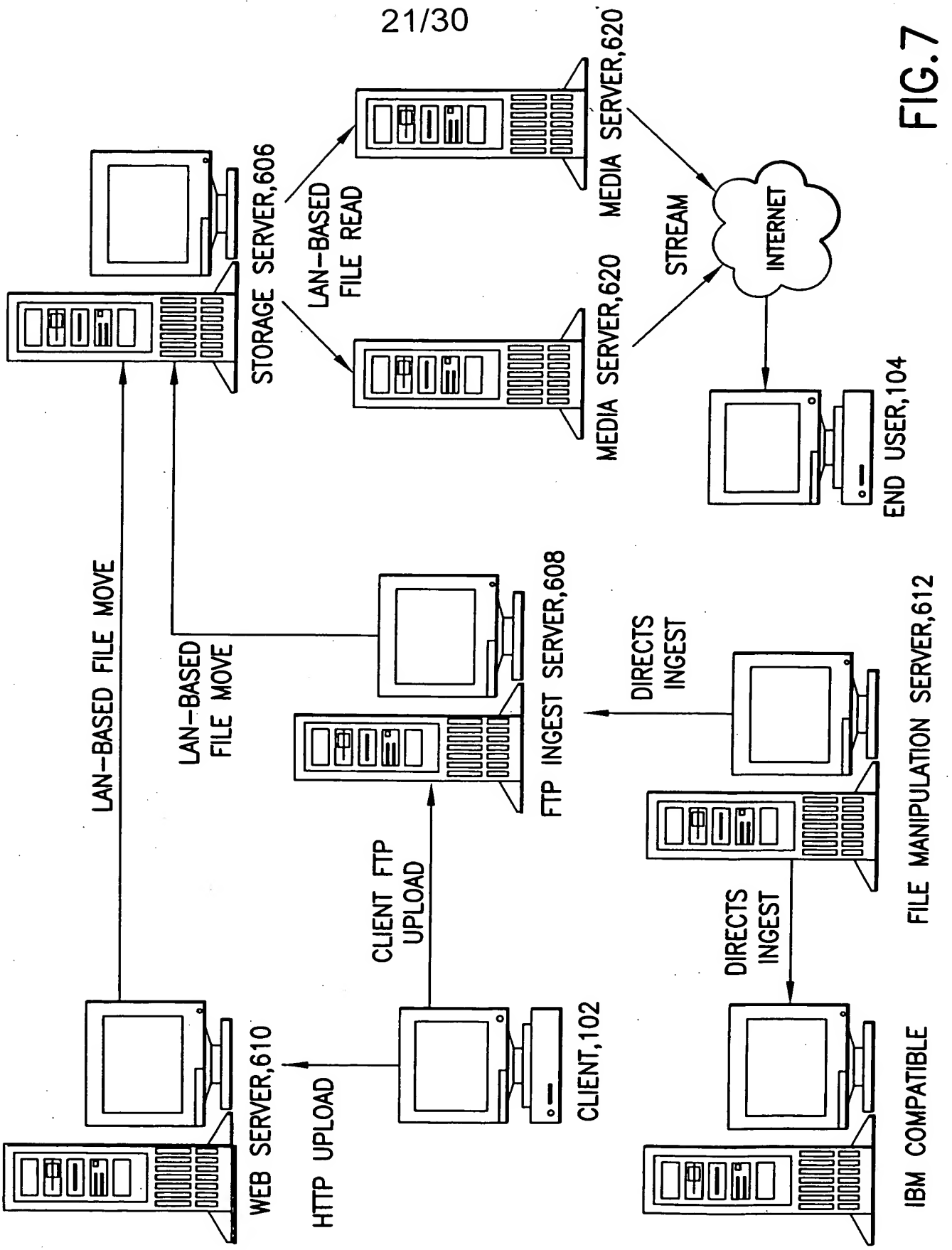
STORAGE SERVER,606
LAN-BASED FILE READ
MEDIA SERVER,620
MEDIA SERVER,620
STREAM
INTERNET
END USER,104
LAN-BASED FILE MOVE
LAN-BASED FILE MOVE
FTP INGEST SERVER,608
DIRECTS INGEST
CLIENT FTP UPLOAD
DIRECTS INGEST
FILE MANIPULATION SERVER,612
WEB SERVER,610
HTTP UPLOAD
CLIENT,102
IBM COMPATIBLE

FIG.7

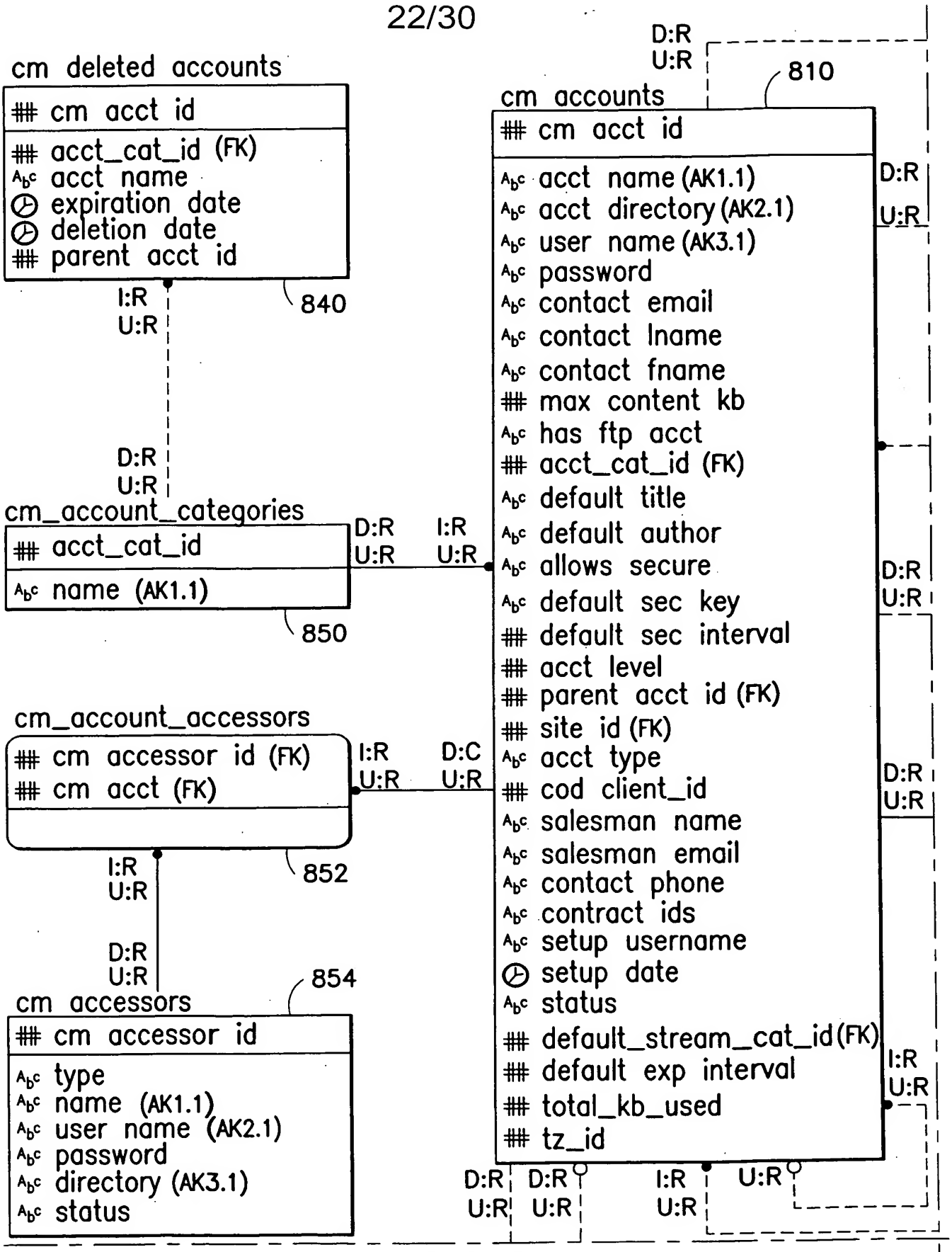
cm deleted accounts
cm acct id
acct_cat_id (FK)
Abc acct name
expiration date
deletion date
parent acct id
840
I:R
U:R
D:R
U:R
cm_account_categories
acct_cat_id
Abc name (AK1.1)
850
D:R
U:R
I:R
U:R
cm_account_accessors
cm accessor id (FK)
cm acct (FK)
852
I:R
U:R
D:C
U:R
I:R
U:R
D:R
U:R
cm accessors
cm accessor id
Abc type
Abc name (AK1.1)
Abc user name (AK2.1)
Abc password
Abc directory (AK3.1)
Abc status
854
D:R
U:R
810
cm accounts
cm acct id
Abc acct name (AK1.1)
Abc acct directory (AK2.1)
Abc user name (AK3.1)
Abc password
Abc contact email
Abc contact lname
Abc contact fname
max content kb
Abc has ftp acct
acct_cat_id (FK)
Abc default title
Abc default author
Abc allows secure
Abc default sec key
default sec interval
acct level
parent acct id (FK)
site id (FK)
Abc acct type
cod client_id
Abc salesman name
Abc salesman email
Abc contact phone
Abc contract ids
Abc setup username
setup date
Abc status
default_stream_cat_id (FK)
default exp interval
total_kb_used
tz_id
D:R
U:R
D:R
U:R
D:R
U:R
D:R
U:R
D:R
U:R
I:R
U:R
I:R
U:R
U:R

FIG.8a

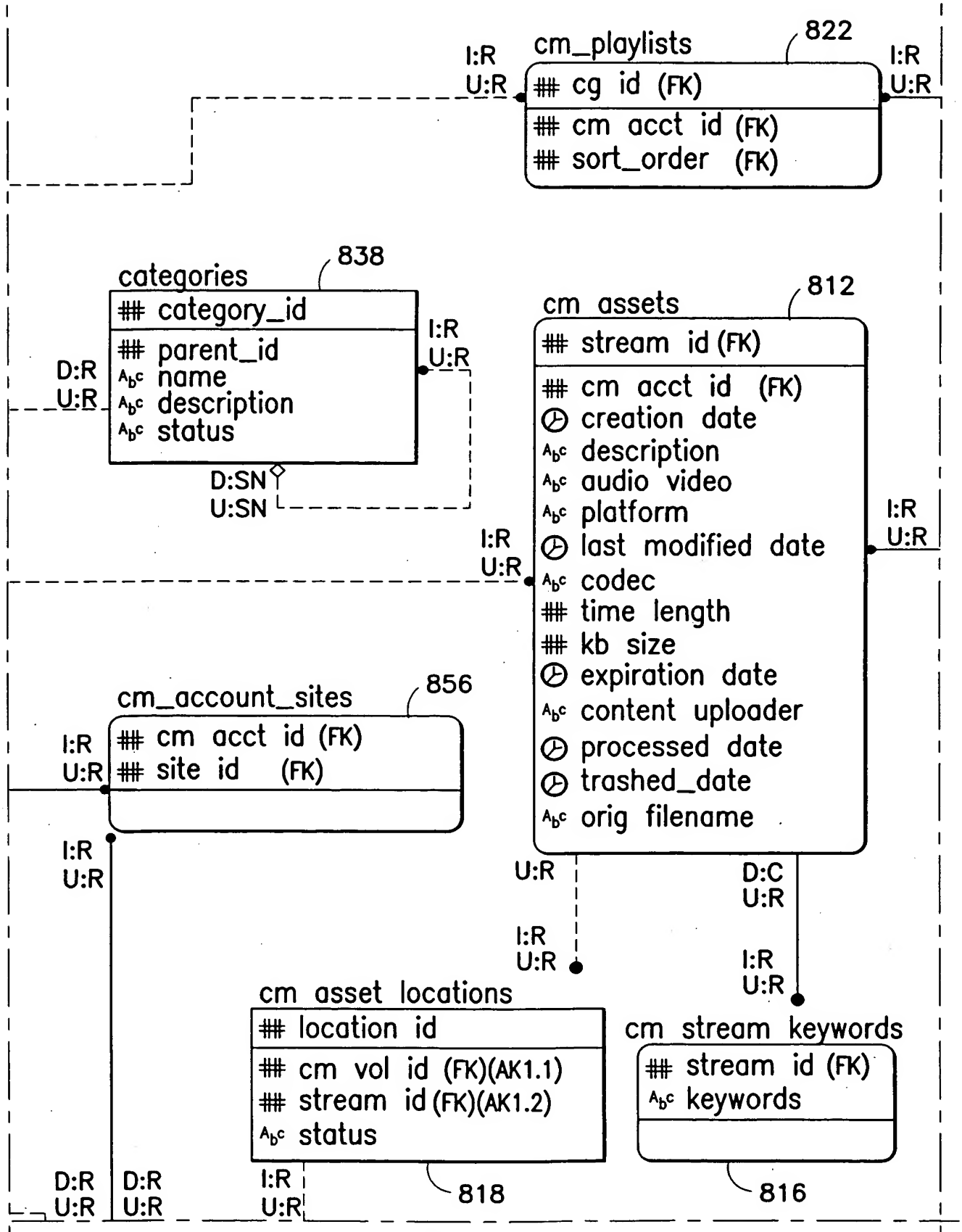
cm_playlists
822
I:R
U:R
cg id (FK)
cm acct id (FK)
sort_order (FK)
categories
838
category_id
parent_id
Abc name
Abc description
Abc status
D:R
U:R
D:SN
U:SN
cm assets
812
stream id (FK)
cm acct id (FK)
creation date
Abc description
Abc audio video
Abc platform
last modified date
Abc codec
time length
kb size
expiration date
Abc content uploader
processed date
trashed_date
Abc orig filename
cm_account_sites
856
cm acct id (FK)
site id (FK)
D:C
cm asset locations
location id
cm vol id (FK)(AK1.1)
stream id (FK)(AK1.2)
Abc status
818
cm stream keywords
stream id (FK)
Abc keywords
816

FIG.8b

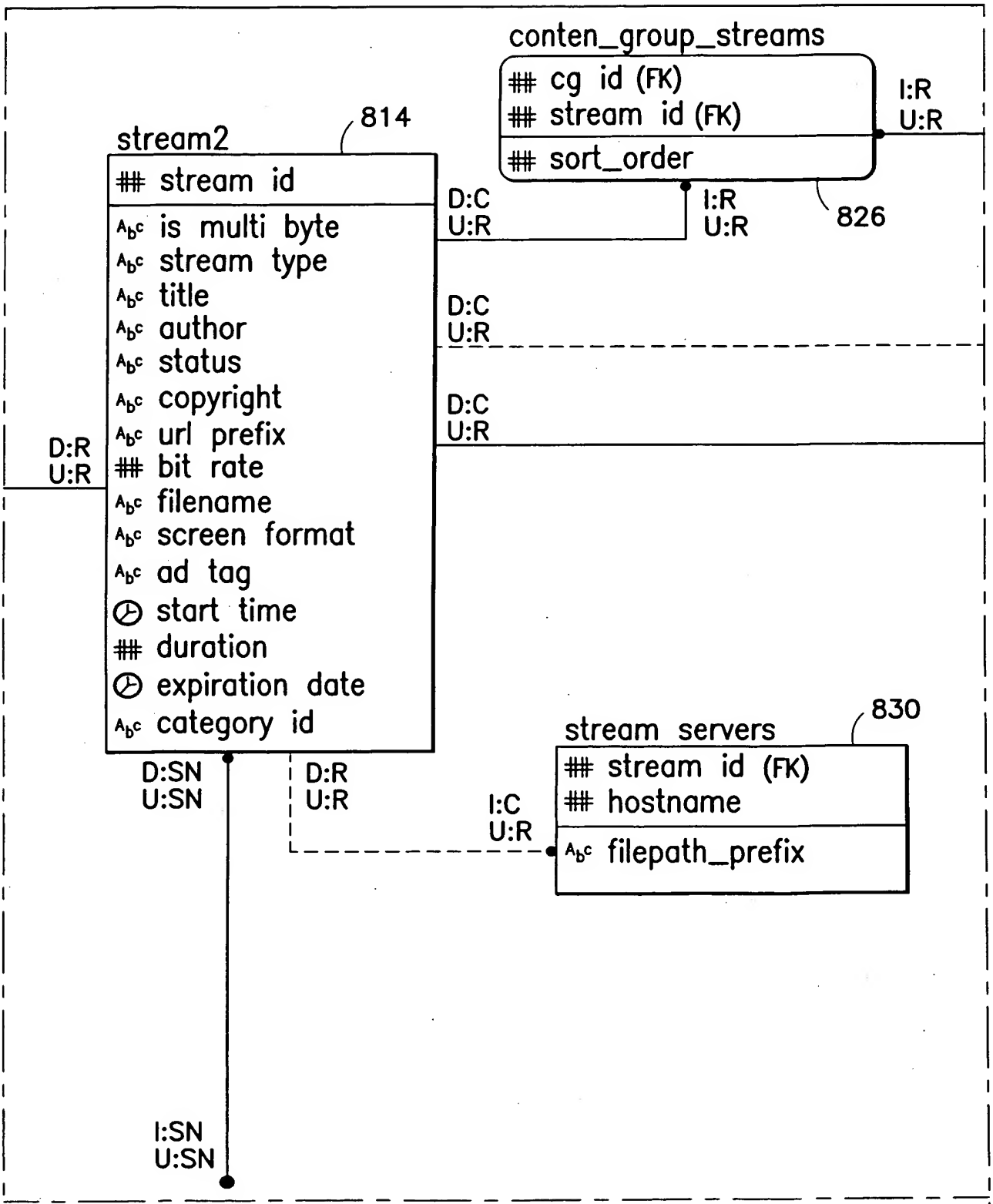
conten_group_streams
cg id (FK)
stream id (FK)
sort_order
I:R
U:R
826
814
stream2
stream id
Abc is multi byte
Abc stream type
Abc title
Abc author
Abc status
Abc copyright
Abc url prefix
bit rate
Abc filename
Abc screen format
Abc ad tag
start time
duration
expiration date
Abc category id
D:C
U:R
I:R
U:R
D:C
U:R
D:C
U:R
D:R
U:R
D:SN
U:SN
D:R
U:R
I:C
U:R
stream servers
830
stream id (FK)
hostname
Abc filepath_prefix
I:SN
U:SN

FIG.8c

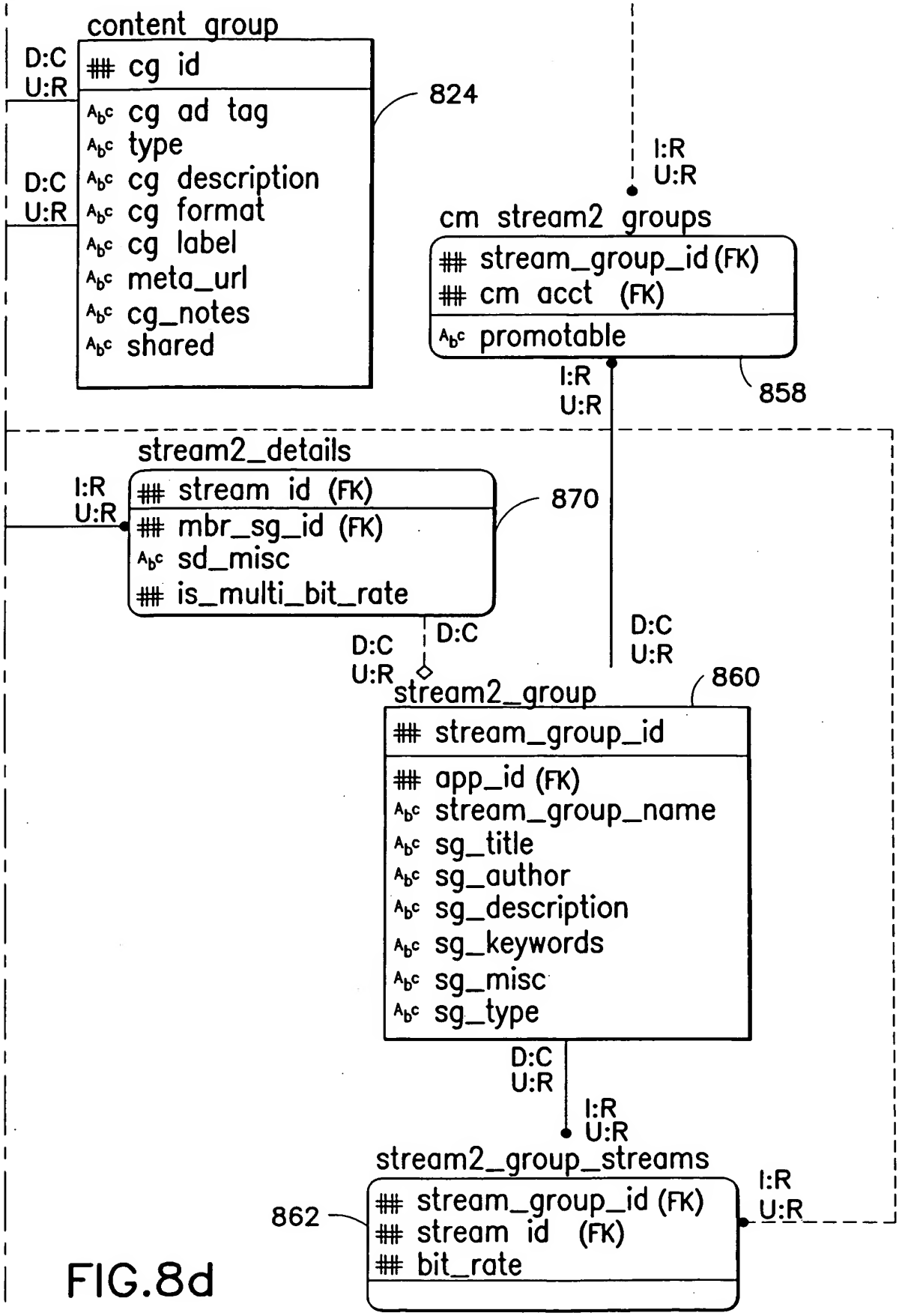
content group
D:C
U:R
cg id
Abc cg ad tag
Abc type
Abc cg description
Abc cg format
Abc cg label
Abc meta_url
Abc cg_notes
Abc shared
824
D:C
U:R
I:R
U:R
cm stream2 groups
stream_group_id (FK)
cm acct (FK)
Abc promotable
I:R
U:R
858
stream2_details
I:R
U:R
stream id (FK)
mbr_sg_id (FK)
Abc sd_misc
is_multi_bit_rate
870
D:C
D:C
U:R
D:C
U:R
stream2_group
860
stream_group_id
app_id (FK)
Abc stream_group_name
Abc sg_title
Abc sg_author
Abc sg_description
Abc sg_keywords
Abc sg_misc
Abc sg_type
D:C
U:R
I:R
U:R
stream2_group_streams
862
stream_group_id (FK)
stream id (FK)
bit_rate
I:R
U:R

FIG.8d

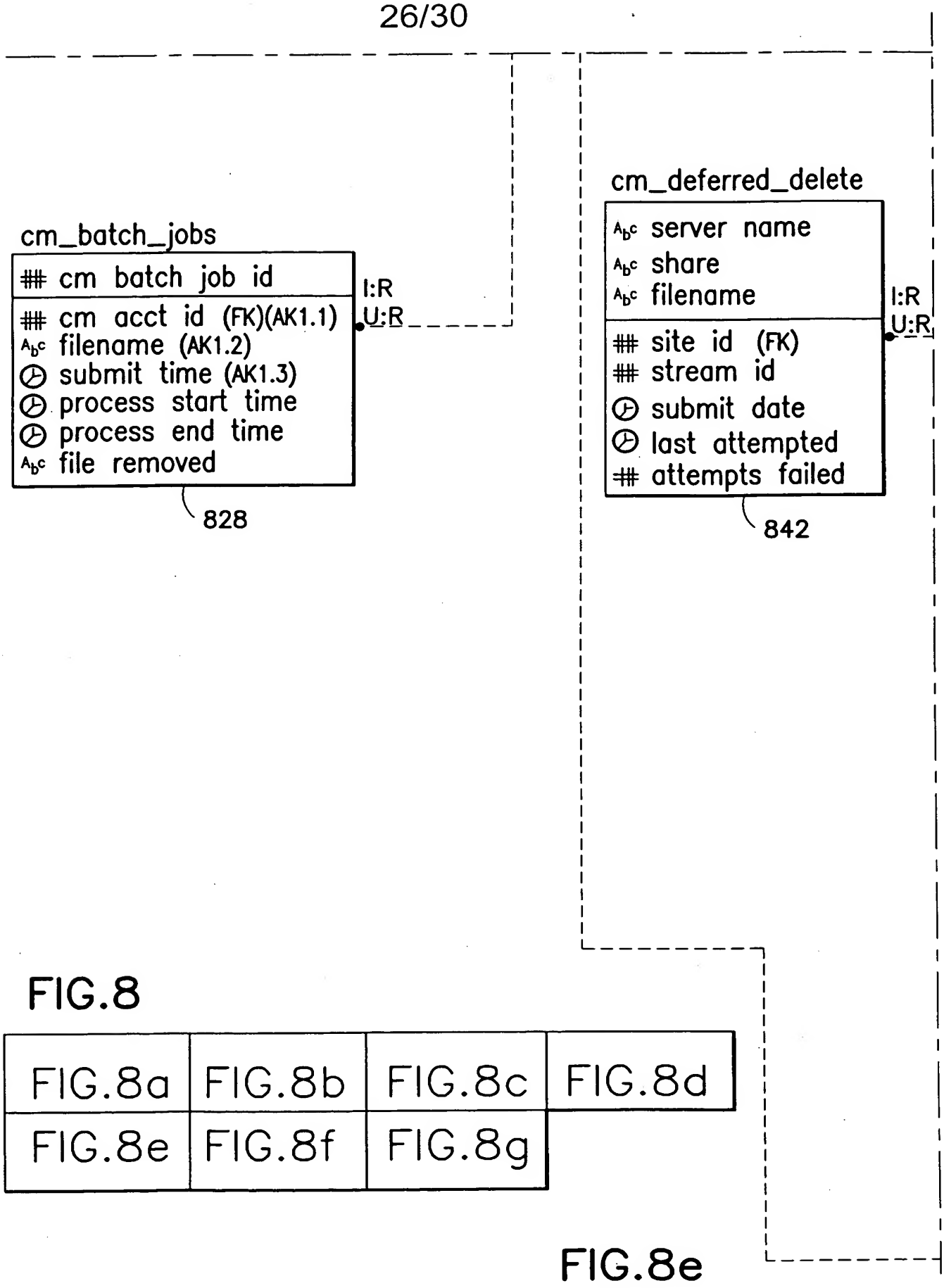

FIG.8

FIG.8a	FIG.8b	FIG.8c	FIG.8d
FIG.8e	FIG.8f	FIG.8g	

FIG.8e

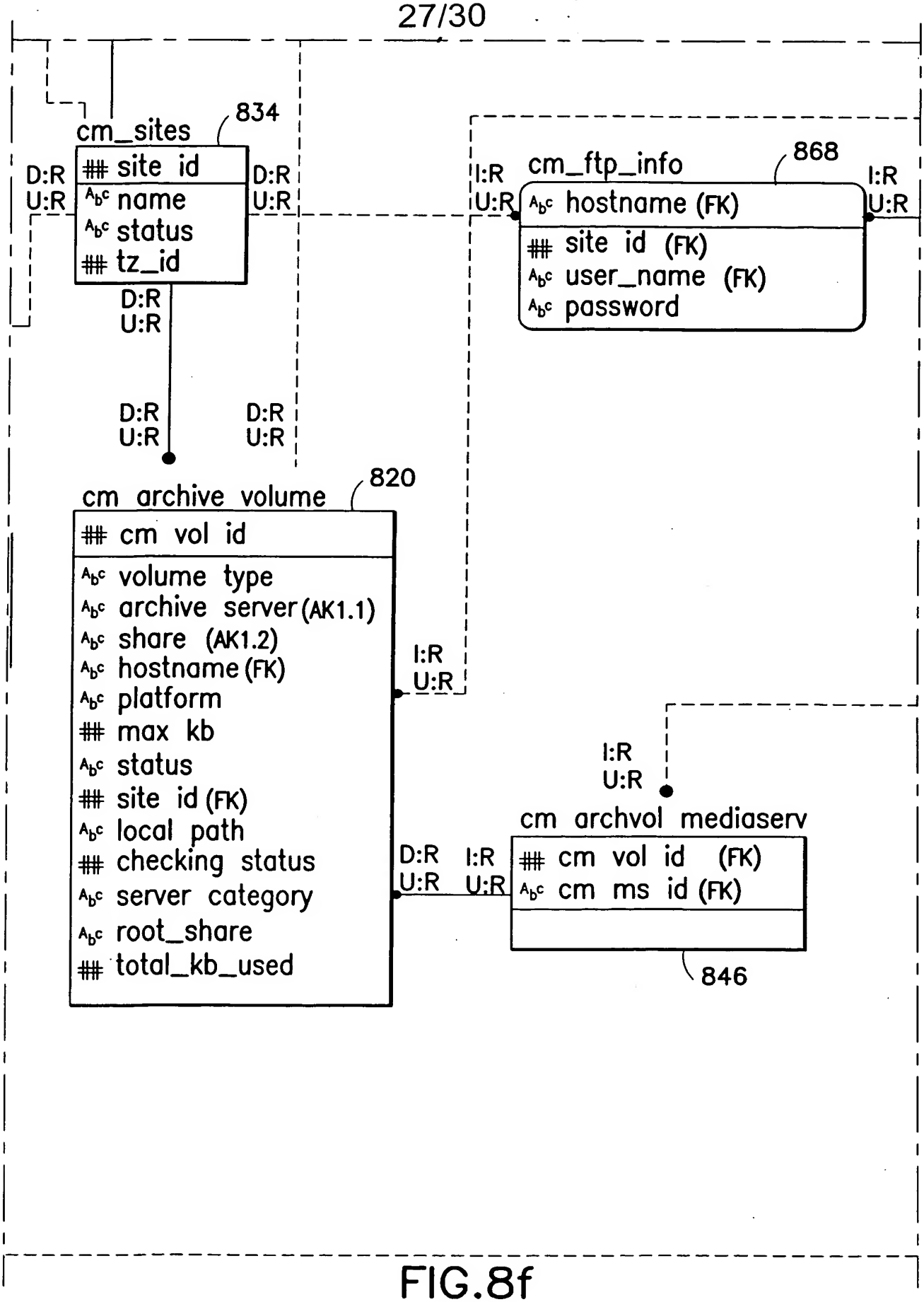
cm_sites
834
site id
Abc name
Abc status
tz_id
D:R
U:R
cm_ftp_info
868
Abc hostname (FK)
site id (FK)
Abc user_name (FK)
Abc password
I:R
U:R
cm archive volume
820
cm vol id
Abc volume type
Abc archive server (AK1.1)
Abc share (AK1.2)
Abc hostname (FK)
Abc platform
max kb
Abc status
site id (FK)
Abc local path
checking status
Abc server category
Abc root_share
total_kb_used
cm archvol mediaserv
cm vol id (FK)
Abc cm ms id (FK)
846

FIG.8f

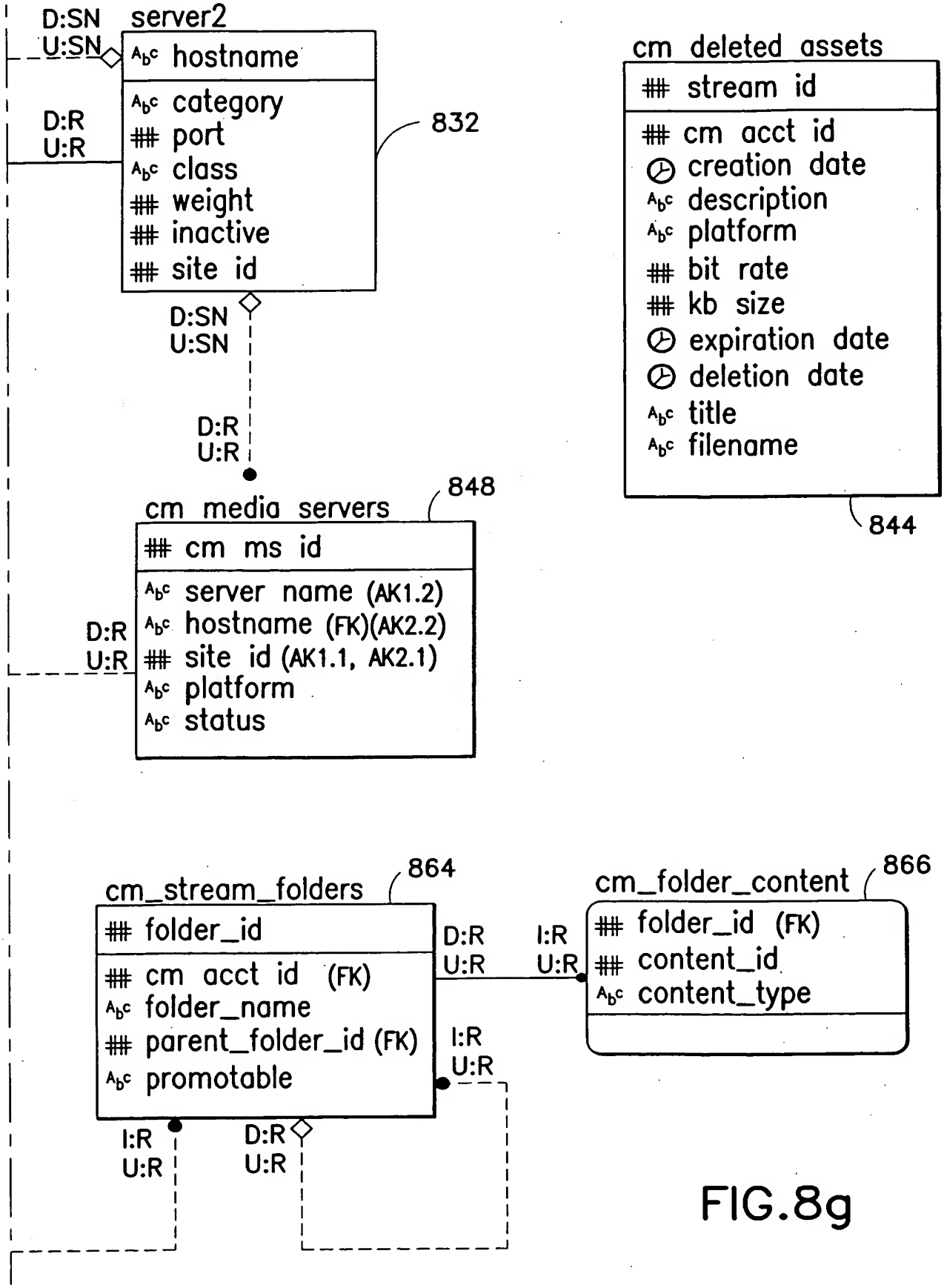
D:SN
U:SN
server2
hostname
category
port
class
weight
inactive
site id
832
D:R
U:R
D:SN
U:SN
D:R
U:R
cm deleted assets
stream id
cm acct id
creation date
description
platform
bit rate
kb size
expiration date
deletion date
title
filename
844
848
cm media servers
cm ms id
server name (AK1.2)
hostname (FK)(AK2.2)
site id (AK1.1, AK2.1)
platform
status
D:R
U:R
864
cm_stream_folders
folder_id
cm acct id (FK)
folder_name
parent_folder_id (FK)
promotable
D:R
U:R
I:R
U:R
866
cm_folder_content
folder_id (FK)
content_id
content_type
I:R
U:R
I:R
U:R
D:R
U:R

FIG.8g

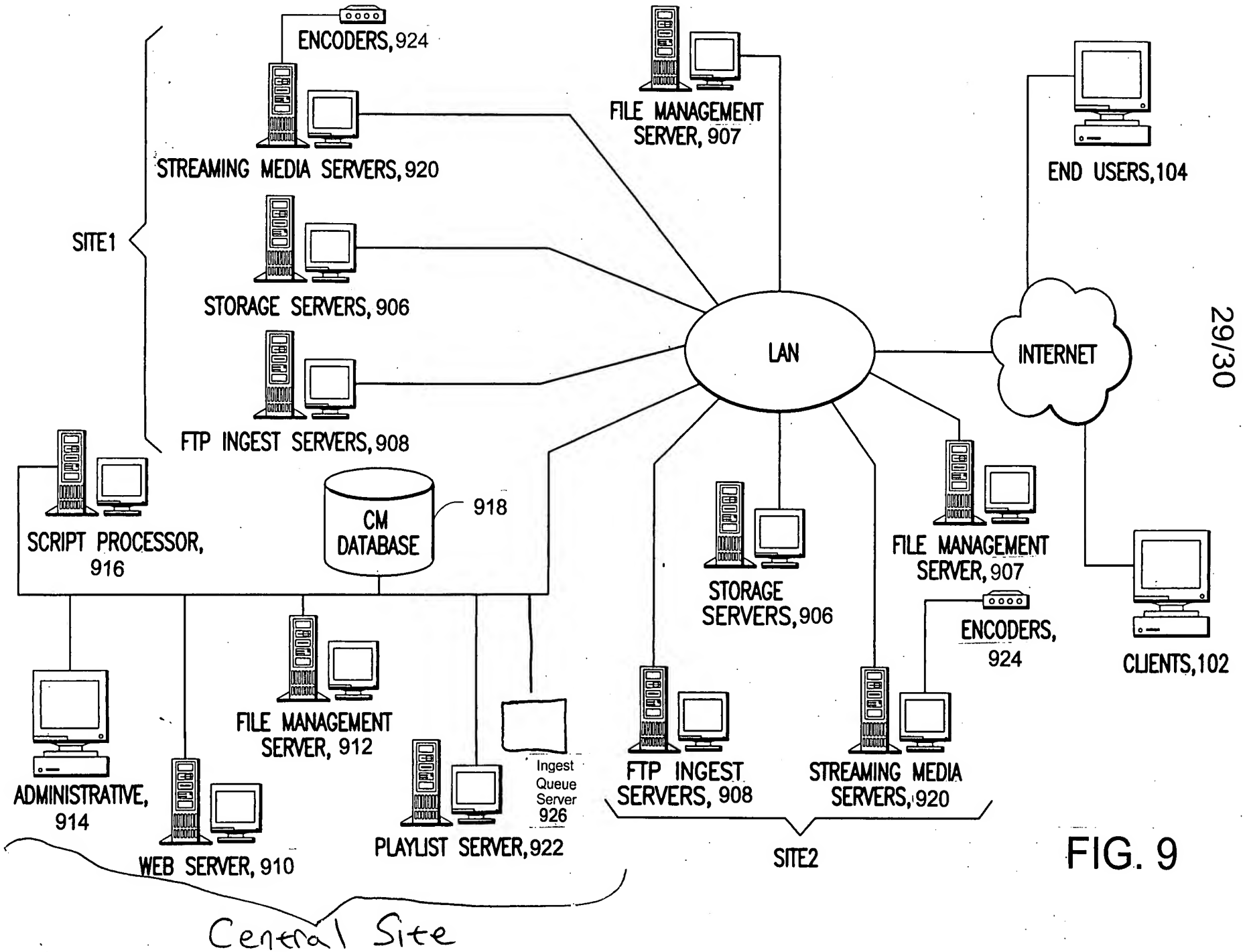
ENCODERS, 924
STREAMING MEDIA SERVERS, 920
SITE1
STORAGE SERVERS, 906
FTP INGEST SERVERS, 908
SCRIPT PROCESSOR, 916
CM DATABASE
918
ADMINISTRATIVE, 914
FILE MANAGEMENT SERVER, 912
WEB SERVER, 910
PLAYLIST SERVER, 922
Ingest Queue Server 926
Central Site
FILE MANAGEMENT SERVER, 907
LAN
INTERNET
END USERS, 104
STORAGE SERVERS, 906
FILE MANAGEMENT SERVER, 907
ENCODERS, 924
CLIENTS, 102
FTP INGEST SERVERS, 908
STREAMING MEDIA SERVERS, 920
SITE2

FIG. 9

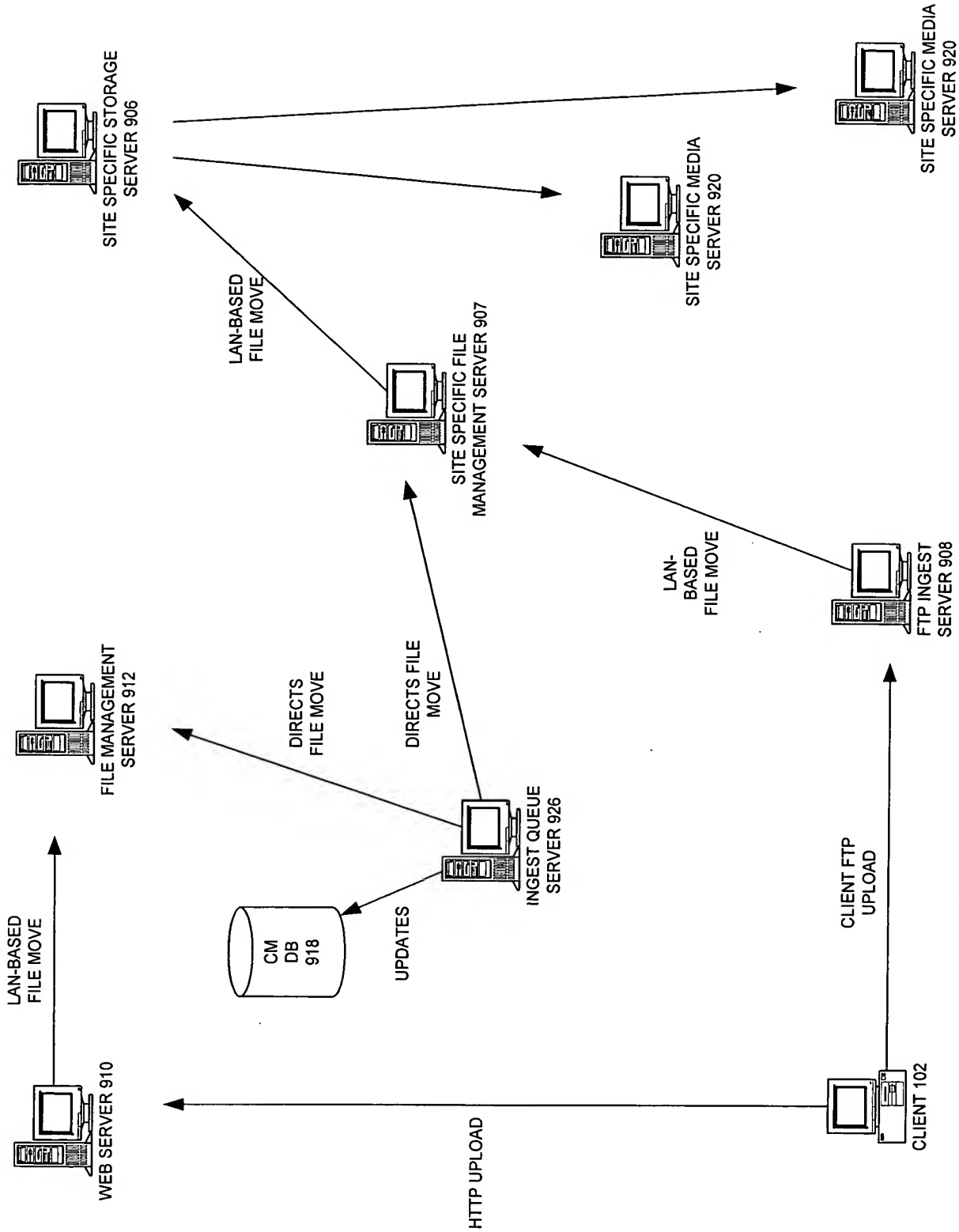
SITE SPECIFIC STORAGE SERVER 906
SITE SPECIFIC MEDIA SERVER 920
SITE SPECIFIC MEDIA SERVER 920
LAN-BASED FILE MOVE
SITE SPECIFIC FILE MANAGEMENT SERVER 907
LAN-BASED FILE MOVE
FTP INGEST SERVER 908
FILE MANAGEMENT SERVER 912
DIRECTS FILE MOVE
DIRECTS FILE MOVE
INGEST QUEUE SERVER 926
CM DB 918
UPDATES
LAN-BASED FILE MOVE
WEB SERVER 910
HTTP UPLOAD
CLIENT FTP UPLOAD
CLIENT 102

FIG. 10